

BEFORE THE PLANNING COMMISSION
OF THE CITY AND COUNTY OF HONOLULU
STATE OF HAWAII

In the Matter of the) FILE NO. 2008/SUP-2
Application of)

DEPARTMENT OF ENVIRONMENTAL)
SERVICES, CITY AND COUNTY)
OF HONOLULU)

To delete Condition No. 14)
of Special Use Permit No.)
2008/SUP-2 (also referred)
to as Land Use Commission)
Docket No. SP09-403) which)
states as follows:)

"14. Municipal solid waste)
shall be allowed at the)
WGSL up to July 31, 2012,)
provided that only ash and)
residue from H-POWER shall)
be allowed at the WGSL)
after July 31, 2012.")
-----)

DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

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CONTESTED CASE HEARING

Ewa-State Special Use Permit Amendment Application -
2008\SUP-2 (RY) Waimanalo Gulch Sanitary Landfill

Taken at Mission Memorial Conference Room,
Mission Memorial Building, 550 South King Street,
Honolulu, Hawaii 96813, commencing at 9:10 a.m., on
March 7, 2012, pursuant to Notice.

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BEFORE: SUE M. FLINT, RPR, CSR 274
Notary Public, State of Hawaii

APPEARANCES:

Planning Commission:

- GAYLE PINGREE, Chairwoman
- CORD D. ANDERSEN, Member
- DANIEL S.M. YOUNG, Member
- BEADIE DAWSON, Member
- JAMES C. PACOPAC, Member

For the Planning Commission:

WINSTON K.Q. WONG, ESQ.
 Deputy Corporation Counsel
 Department of the Corporation Counsel
 530 South King Street, Room 110
 Honolulu, Hawaii 96813

1 Appearances (continued):

2 For the City and County of Honolulu, Department of
3 Environmental Services:

4 DANA MIE OSHIRO VIOLA, ESQ.

5 ROBERT BRIAN BLACK, ESQ.

6 Deputies Corporation Counsel

7 City and County of Honolulu

8 530 South King Street, Room 110

9 Honolulu, Hawaii 96813

10

11 For Ko Olina Community Association and Senator Maile
12 Shimabukuro:

13 CALVERT GRAHAM CHIPCHASE, IV, ESQ.

14 CHRISTOPHER T. GOODIN, ESQ.

15 Cades Schutte

16 1000 Bishop Street, Suite 1200

17 Honolulu, Hawaii 96813

18

19 For Schnitzer Steel Hawaii Corp.:

20 IAN L. SANDISON, ESQ.

21 ARSIMA A. MULLER, ESQ.

22 Carlsmith Ball LLP

23 ASB Tower, Suite 2200

24 1001 Bishop Street

25 Honolulu, Hawaii 96813

I N D E X

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WITNESS: SHAD KANE

Mr. Chipchase 6

WITNESS: DWIGHT MILLER

Mr. Chipchase 20, 109, 184

Ms. Viola 30, 155

Mr. Sandison 105, 182

Planning Commission 189

1 CONTESTED CASE HEARING

2
3 CHAIRWOMAN PINGREE: Good morning. Call
4 the meeting to order. Today is day five of the
5 contested case hearing in the Ewa-State Special Use
6 Permit Amendment Application-2008/SUP-2, Waimanalo
7 Gulch Sanitary Landfill.

8 Counsel, if you would kindly identify
9 yourselves for the record.

10 MS. VIOLA: Dana Viola, Deputy Corporation
11 Counsel, and Brian Black on behalf of the City.

12 MR. SANDISON: Ian Sandison and Arsima
13 Muller on behalf of intervenor Schnitzer Steel
14 Hawaii Corp.

15 MR. CHIPCHASE: Cal Chipchase and Chris
16 Goodin for the Ko Olina Community Association and
17 Senator Maile Shimabukuro.

18 CHAIRWOMAN PINGREE: Thank you very much.
19 As I recall, you --

20 MR. CHIPCHASE: Yes. Chair, for our next
21 witness we would call Shad Kane.

22 CHAIRWOMAN PINGREE: Good morning, Mr.
23 Kane.

24 THE WITNESS: Good morning.

25 CHAIRWOMAN PINGREE: Would you kindly

1 raise your right hand so that I can swear you in?

2

3

SHAD KANE,

4 called as a witness, being first duly sworn to tell

5 the truth, the whole truth and nothing but the

6 truth, was examined and deposed as follows:

7

CHAIRWOMAN PINGREE: Thank you.

8

9

E X A M I N A T I O N

10 BY MR. CHIPCHASE:

11 Q. Mr. Kane, if you would, put in your own

12 words, summarize your testimony and your

13 experiences.

14 A. Okay. Just a little -- I guess you need a

15 background. I graduated from Kamehameha Schools,

16 UH, and a master's from Central Michigan. Retired

17 from the -- as a lieutenant from the Honolulu Police

18 Department after 34 years of service.

19 I personally sit on the Oahu Island Burial

20 Council and I also sit -- on the State level. And

21 on the City level, I sit on the Clean Water Natural

22 Lands Commission for the City Council.

23 I belong to a number of Native Hawaiian

24 organizations, non-profits and organizations.

25 I served as the chair for the

1 Makakilo/Kapolei/Honokai Hale Neighborhood Board and
2 I also served on the blue ribbon landfill committee
3 back in 2003, along with George Yamamoto, Todd Apo,
4 Cynthia Rezentes, Bruce Anderson, Cynthia Thielen,
5 the chair of the Kailua Neighborhood Board and I
6 think there were several others, but to the best of
7 my recollection those are amongst those people that
8 sat on that blue ribbon committee with me.

9 I am opposed to continuing the operation
10 at Waimanalo Gulch Sanitary Landfill for several
11 reasons. One is, we've been through this so many
12 times and it gets to the point where you really
13 don't believe anybody when these kinds of
14 discussions come up, and I personally just believe
15 and feel that those people who had a part in
16 establishing that blue ribbon committee knew that it
17 was to fail. I think these kinds of things are just
18 done in an effort to kind of color over things and
19 make things look good from a political perspective.
20 I believe there is a solution to this, real quickly.
21 I think I'm just -- we're just all kind of tired of
22 just simply kicking this can when it's so easy to
23 pick it up, and there is a solution to this, and
24 before I share a little bit regarding the -- my
25 opposition with respect to the impacts that the

1 landfill brings up, let me just share this real
2 quickly, as fast as I can.

3 At the time we were having those
4 discussions on the blue ribbon committee, and the
5 focus was actually to -- amongst a whole bunch of
6 choices, which place would best serve the needs of
7 this city. And the manner in which it was
8 organized, it was really doomed to fail. But what
9 came out of that is discussions and talks about the
10 possibility of an alternative tech park. And it was
11 a meaningful discussion we had at that point, where
12 I even went out to a possible site with respect to
13 that, so there was meaningful discussions and I
14 think sincere intent to take a look at alternative
15 technology. It all fell apart when the decision was
16 made to extend the life of the landfill.

17 The solution to all the things that we're
18 talking about comes from shutting down the landfill.
19 I think there will be political will and motivation
20 by all of us to find a solution to this landfill
21 issue.

22 I'm also opposed to this simply because of
23 the impacts it has with respect to several -- from
24 several different perspectives, from a cultural --
25 from a social perspective, it's really kind of

1 divided, this island, between the leeward side and
2 other places, when I think we all know that there is
3 -- in these kinds of decisions, it needs to be
4 something in the best interest of everyone, rather
5 than one segment of our community as opposed to
6 another segment of our community, and that's where
7 the blue ribbon landfill committee fell apart. I
8 think it's really unfair to burden one group of
9 people over others. And again, there is a solution,
10 and the solution is shutting down the landfill and
11 creating that motivation to find a solution.

12 From an environmental perspective, I don't
13 think I need to go into that. I think we all know
14 how critical it is and I think it's -- we need to
15 kind of understand. I think we all do know this,
16 but for some reason, you know, there's issues, other
17 issues that we deal with that kind of clouds our
18 thinking. The fact of the matter is that we're an
19 island and we can't lose sight of that fact. The
20 impacts on an island is much greater than on a
21 continent. We as an island community should be --
22 the people -- should be the place where other
23 countries come to us to seek knowledge and
24 information regarding environmental and ocean
25 sciences. We should be the lead in that. It's just

1 that we simply don't have the political will. The
2 motivation is shutting down the landfill.

3 From a cultural perspective, the impact
4 regarding our cultural perspective -- all other
5 indigenous cultures, all the other countries
6 consider their culture or their ancient cultural
7 past as treasures. If other countries -- they bring
8 to life their past and they make it a part of their
9 daily lives. And all the things that we do here --
10 our cultural past is a plastic one here. It's a
11 commercial one. It's sad that we here in Hawaii, we
12 bury much of that past, where we should truly
13 treasure that. That's what makes us extremely
14 unique compared to anyplace else in the whole world.
15 This is the best place to live in the whole world as
16 far as I'm concerned, and it's in these things of
17 the past.

18 This past year I wrote a book called
19 Cultural Kapolei, and one of the chapters that I
20 wrote on was titled The Navigational Stones of
21 Waimanalo Gulch. However, that's really a small
22 part of that cultural past associated with Waimanalo
23 Gulch. And that actually was brought to light by
24 archaeologists that did a survey in anticipation of
25 expansion of the Waimanalo Gulch landfill. Few of

1 us realize that -- and I think those of us on the
2 blue ribbon committee came to realize that, that the
3 largest gulch on the island of Oahu is Waimanalo.
4 Interestingly enough, it's the largest gulch simply
5 because it had a substantial amount of water and
6 erosion historically, and the sad part of that is
7 that it made it the subject of a landfill. It's
8 just very disturbing.

9 You know, something -- beyond where that
10 -- they're working right now or filling in or right
11 in the immediate area there were substantial numbers
12 of native plants. I'm sure by today all those
13 native plants are gone.

14 A number of years ago, when they first
15 opened the landfill, Emma DeFries was asked to come
16 and help them solve a problem when they were first
17 building the Waimanalo Gulch landfill, to help them
18 understand why a lot of people were getting hurt in
19 the construction of the Waimanalo Gulch Landfill.
20 And she shared with them a particular stone that
21 apparently she attributed much of that -- the
22 problems that they were having at that time. The
23 reality of that, that stone that she found -- I
24 don't want to say it's not a reality. It is, but
25 what I'm saying is that that was one stone. Beyond

1 where they are right now are numerous stones of the
2 same structure and the same shape with respect to
3 that stone that they found. That stone was
4 ultimately removed and located at the top of Fort
5 Arizona, which is on the Waianae side ridge of
6 Waimanalo Gulch.

7 But beyond that, and -- I don't know if I
8 can even help us understand this. Let me kind of
9 just share this. I'm trying to do this in a manner
10 where I can do it within the time that I'm allotted
11 and the thing is, it's so much information. But let
12 me just try to share it this way. Marion Kelly, who
13 was an anthropologist, recently passed away, I
14 guess, several months ago, and she refers to the
15 leeward side of Oahu as the celebrated land of our
16 ancestors. She's making -- she's not speaking so
17 much of our ancestors here in Hawaii but our
18 ancestors in the southern latitudes, and I want to
19 be able to help us understand the connection between
20 her comment and Waimanalo Gulch, and I hope I can do
21 it in this way.

22 There's similarities on every island. If
23 you take a look at every island, every island is
24 divided by a saddle. On the island of Oahu, they
25 have a saddle between the Waianae mountains and the

1 Koolau mountains. On Maui you have Haleakala,
2 separated by a saddle with the West Maui mountains.
3 On Hawaii island, you have a saddle that separates
4 north Kohala, Mauna Kea from Mauna Loa, Hualalai.
5 On the southern side of every island there's a
6 physical connection with the southern latitudes.
7 Ka'u, for example, on South Point on Hawaii island
8 -- stories associated with -- as a place of
9 departure for those -- the Maoris of today that live
10 in Aotearoa, and if you speak to them, they'll share
11 that connection that Ka'u is a place that they all
12 came from. Ukumehame, on Maui, just adjacent to
13 Maalaea makes reference to the southern latitudes by
14 way of Kealahakiki Channel, with Lanai on one side
15 and Kahoolawe on the other.

16 Just to expand on that, when they first --
17 when the Hokule'a was first making attempts to reach
18 Tahiti, the canoe used to go north, then east to
19 find the winds to get it to where it needed to go,
20 and they failed for a number of years, and I think
21 today we all know that they succeeded in 1976 -- if
22 I have the year correct -- when they actually
23 referred to the traditions and tried to follow the
24 traditions, which was in opposition to what most
25 people were suggesting. So rather than going east

1 -- going north, then east; they went through -- they
2 went from Maui, they went between the Kealahiki
3 Channel, and on that particular year they succeeded
4 in getting to Tahiti. On the island of Oahu,
5 Waimanalo Gulch is in that exact same place. You
6 compare Ukumehame to Waimanalo Gulch and Palehua,
7 it's the exact same kind of location.

8 As a matter of fact, the wind farm that
9 was being discussed back around the same time, I
10 think, back at that time -- they wanted to place
11 windmills at the top of Palehua -- was actually
12 opposed to by a number of people. But today they
13 placed that wind farm on that exact same kind of
14 location, at the top of Ukumehame, to get a sense of
15 that location.

16 This region points to the lone star --
17 Waimanalo Gulch, Ko Olina points to the lone star of
18 the Southern Cross. The Southern Cross was a very
19 critical constellation with respect to ocean
20 voyaging. I'm talking about navigational stones and
21 I'm talking about points of reference on the
22 horizon. The stars that they were familiar with in
23 the south were the stars that can be seen south of
24 the equator, and our latitude at 20 degrees north
25 latitude, the only star you can see is one star of

1 the Southern Cross.

2 Now, that star was very critical, because
3 in order to pick up -- what the Southern Cross does,
4 it tells you you're going in the right direction,
5 not necessarily finding where you need to go. It
6 tells you you're going in the right direction. So
7 the Southern Cross is so important. As you're going
8 south from Hawaii to the southern latitudes, the
9 constellation rises in the sky. As you move north,
10 you lose sight of the stars. At our latitude you
11 can only see one star of the Southern Cross. With
12 respect to the comment that was made by Marion
13 Kelly, she's making reference to the fact that the
14 leeward side of the island is the place where you
15 can find your way back to where we once came from,
16 and that's the significance of the navigational
17 stones.

18 What's even more important than that, the
19 stones that were found actually on the makai side or
20 further makai of the deeper access or the deeper
21 regions of the valley -- there's actually more
22 navigational stones, and I think I submitted
23 photographs as part of my testimony to help identify
24 those particular stones, which were much more
25 substantial. And what's also important to

1 understand, that one particular stone is roughly --
2 is about 15, 20 feet tall. It's a free-standing
3 stone, standing on a paved platform, and that stone
4 is at the extreme end of Waimanalo Gulch.

5 The real difficulty is the fact that today
6 it's so difficult -- it's a struggle to get -- to
7 help -- to get people to understand that the stories
8 and the things of the past is not just a story but a
9 history. The significance of navigational stones,
10 these kinds of structures we're talking about? It
11 provides support for stories. It makes the stories
12 something real. It helps all of us understand that
13 the stories of Kane Kanaloa, the stories of Hi'iaka
14 are not myths, are not legends, but a historical
15 account of our past. Places such as Waimanalo Gulch
16 is so important for us to save these pieces of the
17 past. That is the very foundation upon which we can
18 grow. Without that historical past, irregardless
19 whether we see ourselves as Americans, whether we
20 see ourselves as whatever nationality, we need that.
21 We need that ancient past to go. Without that, we
22 have nothing and we're not going to go anywhere.

23 It's important that we shut down Waimanalo
24 Gulch. And I think it will provide us with the
25 motivation and the political will to find a

1 solution. The question is: Are we capable of
2 making the right choices? Mahalo.

3 CHAIRWOMAN PINGREE: Thank you, Mr. Kane.
4 Thank you very much.

5 MS. VIOLA: No questions. Thank you.

6 MR. SANDISON: No questions.

7 MR. CHIPCHASE: No questions. I'd just
8 point out that the pictures he referenced are in
9 Exhibit 129.

10 CHAIRWOMAN PINGREE: 129. Thank you very
11 much.

12 Pardon me. Commissioners, do you have any
13 questions for Mr. Kane?

14 Thank you.

15 MR. CHIPCHASE: Chair, I'd just point out
16 I think Commissioner Dawson said, Perhaps later.
17 Mr. Kane will be leaving, so --

18 CHAIRWOMAN PINGREE: He's going to be
19 leaving. Would you like to speak to Mr. Kane?

20 MS. DAWSON: I think I can look at the
21 statements from him.

22 MR. CHIPCHASE: Chair, for our next
23 witness we would call Dwight Miller.

24 CHAIRWOMAN PINGREE: Thank you.

25 MR. CHIPCHASE: And Chair, as Mr. Miller

1 takes his seat, I'd ask that the commission
2 designate him as an expert witness. Very briefly,
3 on his background, we've attached a copy of his
4 background information as Exhibit K19, and you
5 should have copies for everyone in a packet that
6 includes his testimony and expert reports that we'll
7 pass out now.

8 Mr. Miller is an expert in solid waste
9 management, including landfill siting and design and
10 comprehensive solid waste management. He has a BS
11 in environmental science and an MS in environmental
12 engineering. He's been with Parametrix for 26
13 years. Parametrix is a full-service engineering,
14 environmental compliance and planning firm. He is
15 the program manager of environmental planning and
16 compliance at Parametrix.

17 He's registered as a civil engineer in
18 Hawaii, Washington and other states. He has
19 significant project experience, including landfill
20 siting, as the person in charge of the landfill
21 siting. And to be in charge of landfill siting, you
22 must be an expert in landfill design.

23 He has worked extensively in Hawaii,
24 including being the primary person responsible for
25 four closures of landfills in Hawaii and the project

1 manager for the development of the first
2 comprehensive solid waste management plan in the
3 county of Maui. He's previously been admitted to
4 testify as an expert witness and he has the
5 knowledge, experience and credibility to be of
6 assistance to this commission.

7 CHAIRWOMAN PINGREE: Thank you, Mr.
8 Chipchase.

9 Good morning, Mr. Miller.

10 THE WITNESS: Morning.

11 CHAIRWOMAN PINGREE: I'm going to swear
12 you in, if you will kindly raise your right hand.

13

14 DWIGHT MILLER,
15 called as a witness, being first duly sworn to tell
16 the truth, the whole truth and nothing but the
17 truth, was examined and deposed as follows:

18

19 MR. CHIPCHASE: Before he begins, I just
20 want to be clear that he is being accepted as an
21 expert witness.

22 CHAIRWOMAN PINGREE: He is. Counsel --

23 MS. VIOLA: No objection.

24 MR. SANDISON: No objection.

25 CHAIRWOMAN PINGREE: Thank you.

1 MR. CHIPCHASE: Thank you.

2

3 E X A M I N A T I O N

4 BY MR. CHIPCHASE:

5 Q. Mr. Miller?

6 THE WITNESS: Thank you for having me
7 today. I look forward to an engaging dialogue with
8 the commission on the issues of solid waste
9 management here in Honolulu.

10 Just to back up the comments regarding my
11 experience, I've managed and provided engineering
12 support for numerous landfill closures, as well as
13 -- landfill closures here in Hawaii, as well as
14 landfill expansion and siting efforts here in the
15 islands; also, and I think probably more
16 importantly, having long-term experience on solid
17 waste management planning, kind of the more
18 comprehensive approach and look at landfills,
19 particularly with Maui County in the '90s, as well
20 as since then with other projects here in the
21 islands.

22 I guess what I would say to that is that
23 this has really provided me with an enduring love of
24 working here, for sure, but also with really looking
25 at what it is to have the sustainable solid waste

1 management process or approach here in Hawaii. So I
2 am very interested in providing some of my thoughts
3 here to the commission.

4 To that point of my being here today, I've
5 been requested to really provide opinion on three
6 particular areas that I'll address here. First off
7 is the state of practice for alternative methods for
8 processing and/or disposing of solid waste and the
9 City's diligence in pursuing such alternative
10 methods; the process for siting a new landfill on
11 Oahu and the effectiveness of the City's efforts
12 through the current site selection process; and
13 finally, the current design and operation of
14 Waimanalo Gulch Sanitary Landfill and their impacts
15 on public health and safety.

16 Under my supervision and approval, my
17 office prepared a technical report on each of these
18 areas and I prepared my summary declaration. That's
19 what you have received here today. So my opinions
20 are provided within those and I will restate them
21 here and can expand upon those.

22 So summarizing my findings, really on the
23 evaluation of alternative solid waste management, I
24 conclude that the City's current use of alternative
25 disposal technologies is inconsistent with current

1 state of the practice with respect to its recycling
2 efforts, biosolids management and medical waste
3 management, essentially not looking at these as a
4 resource that they are, as opposed to as a waste
5 product. Moreover, the City's evaluation of
6 alternative disposal technologies is inconsistent
7 with the current state of the practice, because it
8 has failed to develop and apply realistically
9 effective cost criteria in evaluating these
10 alternatives. I find the lack of inspiring
11 alternatives or execution of these alternatives to
12 be particularly glaring for biosolids, which is
13 truly a resource and should be looked at as a
14 resource, and recycling, including composting.
15 These are materials that are really the low-hanging
16 fruit of solid waste, being able to keep out of the
17 waste stream and out of the landfill. Truly,
18 land-filling of biosolids is not only archaic and
19 rarely done elsewhere in the U.S., but is a huge
20 waste of a needed resource. This is an organic
21 material that could very effectively be used both on
22 agricultural lands as well as other resource lands
23 and for private use around the island. Also, truly,
24 by the application of alternative methods, there's
25 no need beyond 2013 to have a general purpose MSW

1 landfill here on the island. You have a waste
2 incinerator with expansion coming on and so there
3 really is not a need for a general purpose -- when I
4 state general purpose, what I'm really referring to
5 is one that is receiving putrescible waste, so the
6 biosolids, the food waste, the green waste,
7 incidental green waste and so forth into it.

8 Secondly, regarding the landfill siting
9 process, I conclude that the City's current site
10 selection process is flawed in the areas of process,
11 measurement and weighting. The process fails to
12 move from the broader approach to looking at many
13 sites to kind of a narrowed site. In fact, I'd like
14 to give a quick kind of graphic of that.

15 A lot of landfill siting processes
16 happened from the late '80s into the '90s and really
17 to the present for the need to replace some -- many,
18 many old, poorly-operated landfills. In that
19 process, we as a company worked on this quite a bit,
20 and what we found that was particularly important in
21 the siting process was really looking at it kind of
22 from a filtering process. So what you're doing is
23 you're looking at many sites up here kind of at the
24 start of the funnel, which is -- you really want to
25 look at the universe of sites that you might have,

1 and then you start excluding those and you start
2 bringing down more details. So, in fact, you have
3 fewer sites that you're looking at, but you're able
4 to look at them in more detail. It's a very
5 diligent way to look at going from many sites --
6 essentially all of the land, which obviously not all
7 of the land is available for siting the landfill,
8 down to a narrower number. So that when you get
9 down to the end, you've done a process that is very
10 rigorous, very public, so that people have had an
11 opportunity to weigh in on sites, and then
12 effectively have an environmental review process
13 that is robust from the standpoint that you've
14 looked at many alternatives, you have evaluated
15 those alternatives, and the alternatives that you've
16 ultimately come up with through the commission and
17 through your council has gone through a rigorous
18 siting process, as well as the environmental review
19 process. So ultimately at the end of the funnel is
20 the site and a couple of other sites that were
21 reviewed in the environmental process that truly
22 have had the rigor needed both from an environmental
23 as well as a social and economic review standpoint.
24 And that's really what it comes down to siting any
25 type of public facility, is ensuring that it's

1 meeting those needs.

2 What's interesting is that the 2008 update
3 to the solid waste management plan provided a fairly
4 good outline for the siting process. What I found
5 interesting is that that process has not been
6 followed under the current landfill siting process,
7 and I think it's really unfortunate that the City
8 hasn't taken advantage of this good work that they
9 did, quite honestly, during the update to the solid
10 waste management plan, which was only completed here
11 in the last couple of years and then moving that
12 forward, and also provided kind of a reasonable
13 diligence from taking from that solid waste
14 management plan -- and that's the idea; to take it
15 from a comprehensive solid waste management plan
16 down to a facility siting process. So that's really
17 the steps that would have been taken to go
18 immediately into a siting process back in 2008,
19 2009, as opposed to waiting until the current time
20 to really get that process moving.

21 A few other points -- the measurement
22 flaws really include an incomplete list of criteria
23 evaluated, those criteria that are kind of up at the
24 top of the funnel, as well as you start applying
25 them; poor or illogical scoring of those criteria

1 and improper use of deciles, and this is reported in
2 much more detail in my other reports. The weighting
3 or criteria is flawed due to organizational problems
4 and how they are aligned together and, you know, to
5 provide for clarity. And then also, the fact that
6 these provide skewed results, because of double
7 counting and so forth as some of the issues. The
8 flaws in the current siting process are evident
9 truly in the recent decision to broaden the criteria
10 and their application, since the committee found
11 that two sites were found given the process as it
12 had been applied.

13 To name a few of the areas that I had
14 concerns after looking at the siting process,
15 particularly here even recently, after last month's
16 committee meeting, was originally not considering
17 the sub-prime agricultural lands, these lands that
18 -- again, looking at kind of a wider universe of
19 properties and ensuring that all sites were looked
20 at in this process and not just excluded out of
21 hand. The fact that only parcels over 90 acres --
22 and originally it was 100 acres were evaluated, and
23 part of that, also, is the fact of not looking at
24 what we call multi-parcel assemblages, so looking at
25 a couple of parcels, maybe two to three or three to

1 four parcel groups that would be able to make up the
2 100 or 120 acres that you may want to have for a
3 site. That's a real drawback that should not be a
4 fatal flaw if it's not a single parcel. Maybe it
5 doesn't get as high a score if it takes multiple
6 parcels, but it shouldn't be excluded out of hand.

7 And finally, the exclusion of parcels with
8 structures on them. It seemed rather odd that -- it
9 seemed like an arbitrary approach, because not
10 knowing what that structure might be and the
11 importance of that structure -- it may be
12 residential, it may not. For many of these lands
13 it's probably just an out-building or something like
14 that -- and at least to be able to keep those in in
15 the process and evaluate it further.

16 And finally, the City has shown, as I
17 noted, a general lack of reasonable diligence in
18 development and execution of the process. First
19 off, it's a poorly-derived process that did not
20 follow from the solid waste management plan that the
21 City completed in 2008, 2009. But then again, the
22 execution of that process was not good. The process
23 should not take this long, especially from the end
24 of the solid waste management plan completion, and
25 as it stands right now, the results are unreliable

1 and truly are open to challenge. That's part of the
2 whole point of having a very rigorous siting
3 process, is that you protect yourself from challenge
4 in an appeal of that decision.

5 And then finally with regard to landfill
6 design and operations, I conclude that the
7 landfill's operation -- operations have been subject
8 to repeated regulatory violations and have
9 consistently deviated from the design and operations
10 plans. In many cases, the designs have been good
11 but the execution has not been good of those design
12 plans. These violations and deviations, as well as
13 employee malfeasance with regards to landfill
14 monitoring, have had great consequences and
15 increased the risk of harm to health and safety,
16 public health and safety.

17 I further conclude that the December 2010
18 and January 2011 spills show that storm water
19 facilities and layout of the landfill cells were not
20 consistent with the design reports and construction
21 sequencing assumptions that were made supporting the
22 2008 Final Environmental Impact Statement for the
23 site, and therefore, a supplemental Environmental
24 Impact Statement likely is required for those
25 actions.

1 One of the things I found particularly
2 interesting is not having these major storm water
3 facilities in place prior to construction of the
4 landfill cell liners, as well as particularly prior
5 to using those landfill cells, and this directly led
6 to the discharges of medical waste.

7 One other thing I found quite interesting
8 and really unbelievable was the fact that the
9 medical wastes were not cleaned up by the City or
10 the operator that did hit beaches. This is my
11 understanding from reports out there. These are
12 materials that while they may not -- they may no
13 longer be a biohazard from their original medical
14 waste use, because they had been autoclaved, they're
15 still sharps, they are still materials that were in
16 a landfill, in a contaminated environment, and then
17 were discharged to an open water body.

18 So to restate kind of my overarching
19 issues here, my three overarching issues:

20 The City has not actively pursued nor
21 implemented the state of practice alternative
22 methods for processing and/or disposing of solid
23 waste using alternative methods. And this is
24 particularly glaring on biosolids and the slow
25 application of new recycling methods within the

1 City.

2 Secondly, the City has shown a lack of
3 reasonable diligence in developing and executing the
4 process for siting a new landfill on the island of
5 Oahu through the current landfill site selection
6 committee. And I guess I would have to state really
7 in support of the committee: A group of volunteers
8 has put their time into this effort for really an
9 effort that is not becoming of their efforts in a
10 voluntary role. It really needs to be more
11 respectful of their time and their efforts in
12 contributing to that committee.

13 And finally, the City's actions or lack
14 thereof has had deleterious impact on the health and
15 safety through its current operation of the
16 Waimanalo Gulch landfill.

17 So that is the end of my opening
18 statement. Thanks.

19 CHAIRWOMAN PINGREE: Thank you very much.

20

21 E X A M I N A T I O N

22 BY MS. VIOLA:

23 Q. Good morning, Mr. Miller.

24 A. Good morning.

25 Q. Who contacted you to testify in this

1 proceeding?

2 A. Who contacted me?

3 Q. Uh-huh.

4 A. The law firm of Cades Schutte,
5 specifically Cal Chipchase.

6 Q. Have you been retained or paid to provide
7 your testimony to --

8 A. Yes, I have, as an expert witness.

9 Q. Prior to this proceeding, did you have any
10 involvement with Waimanalo Gulch?

11 A. No. I once visited it, I think, about 20
12 years ago I think it was.

13 Q. But you had no involvement with design or
14 operations?

15 A. No.

16 Q. -- any involvement with the City involving
17 Waimanalo Gulch prior to this?

18 A. Not at Waimanalo Gulch, no.

19 Q. You state in your resume or your
20 declaration that you have over 20 years of solid
21 waste planning and landfill design experience in
22 Hawaii.

23 A. Uh-huh.

24 Q. And 25 years of experience on the U.S.
25 Mainland.

1 A. Uh-huh.

2 Q. Were you residing in Hawaii for 20 years?

3 A. No. I have experience here as a
4 professional engineer in Hawaii, doing work here,
5 but out of my office in the state of Washington.

6 Q. You don't live in Hawaii?

7 A. I do not.

8 Q. But you were retained for work in Hawaii?

9 A. I was. Correct.

10 Q. You were?

11 A. Yes. In those times, yes. During the
12 early '90s, we also had an office here that I worked
13 through that office as well, our company did.

14 Q. So Parametrix had an office on Oahu in the
15 early '90s?

16 A. Yes.

17 Q. Did that office shut down?

18 A. It did, in the later '90s. I'm not sure
19 on the exact date.

20 Q. So Parametrix had an office here only in
21 the '90s?

22 A. Correct.

23 Q. But it's since shut down?

24 A. Yes.

25 Q. You say that you have experience and

1 worked in Hawaii intermittently through your 20
2 years of, I guess, experience in the state of
3 Hawaii.

4 A. Uh-huh.

5 Q. Over the 20 years, how many projects have
6 you done in Hawaii?

7 A. I have been project manager or senior
8 engineer on ten to a dozen projects here in Hawaii.
9 Those have been landfill closures, closure projects,
10 as well as the solid waste management plan for Maui
11 County, County of Maui, as well as for long-term
12 post-closure care of a landfill here on Oahu.

13 Q. For those 10 to 20, I guess, cases --

14 A. Ten to 12.

15 Q. Those 10 to 12 cases that you were dealing
16 with were all dealing with landfill closures or
17 solid waste management plans, all of the 10 to 12?

18 A. They had -- they were solid waste
19 management projects, either landfill closures or
20 long-term post-closure care issues at landfills or
21 solid waste plants.

22 Q. Really, there are not that many, 10 to 12,
23 landfills in Hawaii.

24 A. Not anymore. There were at a time.

25 Q. So the specific landfill projects that you

1 worked on were just Maui and Kapaa; correct?

2 A. No. Actually, other ones that I have
3 worked on -- on Maui, it was the Olowalu Landfill on
4 West Maui. That was the closure and construction of
5 the closure.

6 Q. When was that?

7 A. That was early '90s. It was the Makani
8 Landfill up in upcountry Maui.

9 Q. Which landfill?

10 A. Makani, in upcountry.

11 Q. Maui?

12 A. Yes. And that was also in the early '90s.
13 And then also the solid waste management plan. Also
14 did subsequent work at the central Maui landfill for
15 actually the new cell development at the County of
16 Maui, the central Maui landfill.

17 Q. That was in?

18 A. That was the late '90s, probably into
19 2001, I would guess.

20 And then, also for Maui county, did the
21 development and -- of the new landfill on Molokai.

22 Q. That was in?

23 A. That was in the early '90s.

24 And just some minor work on the closure of
25 their -- of the landfill on Molokai, as well, also

1 for the County of Maui.

2 And then on the Big Island, worked on the
3 Kailua landfill in Kona, on the closure of that.
4 This is the old landfill and the closure of that
5 landfill. That was the early '90s.

6 And then here on Oahu, the Kapaa landfill
7 for the City of Honolulu.

8 Q. The closure?

9 A. Yes. I was the senior reviewer on that.
10 I was not project manager or engineer of record on
11 that project.

12 And then also, engineer of record for the
13 closure of the Palailai landfill here --

14 Q. I'm sorry?

15 A. Palailai landfill here on Oahu.

16 Q. When was the closure of Palailai?

17 A. Kapaa was the early '90s, before '95.

18 Palailai was closed in '90, and we have been doing
19 -- I have been the engineer of record and I've done
20 annual closure reporting -- post-closure reporting
21 on that landfill for the last 22 years.

22 Q. So on Oahu, you haven't been involved in
23 any design, landfill design; just the closure?

24 A. Closure design, yes. Not new landfill
25 design, no.

1 Q. And you were involved in landfill
2 operations on Oahu, ongoing landfill operations?

3 A. Ongoing post-closure care of the Palailai
4 landfill.

5 Q. This was after it was closed down?

6 A. This is after it was closed, yeah. So
7 it's not operations of the landfill.

8 Q. So it would be safe to say that you don't
9 have any experience on Oahu with operating
10 landfills?

11 A. That is correct.

12 Q. And regarding your testimony, prior to
13 submitting your testimony in written form, did you
14 visit the landfill?

15 A. Prior to preparing my testimony, I did
16 not. My first visit to the landfill was yesterday.

17 Q. I'm aware, because I was with you.

18 A. Yes.

19 Q. So your testimony as you submitted it in
20 written form was purely based on documentation?

21 A. Documentation and personal professional
22 experience.

23 Q. But not personal professional experience
24 with this specific landfill?

25 A. With the specific site, no.

1 Q. Let me go to your specific declaration, as
2 well as your report. This is the Design and
3 Operation Review Technical Memorandum. I want to
4 point you to page nine of your report, under
5 Conclusions.

6 A. So which one is this again? I'm just --

7 Q. I'm sorry. It says Design and Operation
8 Review Technical Memorandum.

9 A. Okay. And page?

10 CHAIRWOMAN PINGREE: Which exhibit is
11 that, Dana?

12 MS. VIOLA: That's Exhibit K146.

13 CHAIRWOMAN PINGREE: Thank you.

14 A. And page?

15 BY MS. VIOLA:

16 Q. Page nine, and the paragraph labeled
17 Conclusions.

18 A. Yes.

19 Q. So in this paragraph you state that:
20 Waimanalo Gulch is conducting the required
21 environmental monitoring of leachate gas -- I'm
22 sorry -- landfill gas, leachate and groundwater.
23 Right?

24 A. Correct.

25 Q. And that some exceedances of methane at

1 perimeter probe GP-8 were noted in 2008 and 2009
2 (sic), but gas is apparently being controlled by
3 improvements or adjustments to the gas extraction
4 system.

5 A. Correct.

6 Q. And you also say that the high
7 temperatures in the landfill gas bear watching and
8 the December 2010 and January 2011 storm water
9 events were catastrophic beyond the 25-year 24-hour
10 storm that the landfill was engineered to withstand.
11 Right?

12 A. Correct.

13 Q. So you're saying that by law, the landfill
14 was only required to design for a 25-year 24-hour
15 storm?

16 A. That is what I'm saying there.

17 Q. And that unfortunately, this -- this
18 larger storm, catastrophic storms, unfortunately led
19 to release of some wastes to the ocean.

20 A. Correct.

21 Q. However, Waste Management Hawaii, WMH,
22 made engineering improvements to the drainage system
23 in response to the event.

24 A. Correct.

25 Q. Just continuing on with your conclusions:

1 The groundwater underlying Waimanalo Gulch Sanitary
2 Landfill is brackish and not usable for drinking
3 water and the groundwater monitoring data have not
4 shown verifiable impacts.

5 A. Correct.

6 Q. So that conclusion to this technical
7 report, that seems to imply that you don't have
8 concerns about, for example, landfill gas, leachate
9 and groundwater, and that the storm event was
10 catastrophic and therefore not something that the
11 operators were required to design for?

12 A. I think, as I made in my statement, that I
13 would add to that conclusion that the lack of
14 diligence in completing drainage improvements prior
15 to starting operation -- well, first off, prior to
16 completing construction and construction that was
17 not to the original design intent for the cell, as
18 well as not completing the drain improvements prior
19 to the construction of the cell and operation of the
20 cell, specifically, that led to the catastrophic
21 release of the medical waste.

22 I am not saying necessarily that that
23 wouldn't have happened, but it certainly would have
24 helped to have had those drainage improvements
25 completed. I mean, that's just essentially due care

1 in your operation and construction of a site, to
2 have your drainage improvements completed prior to
3 construction of your cell and operation of your
4 cell.

5 Q. Are you aware of the entity that is
6 authorized to regulate the design and operation of a
7 landfill?

8 A. Yes.

9 Q. What agency is that?

10 A. Department of Health.

11 Q. Department of Health. Specifically, the
12 Solid and Hazardous Waste Branch; is that correct?

13 A. Correct.

14 Q. They would oversee the design as well as
15 the operation of the landfill to assure that the
16 facility is in compliance with the law; is that your
17 understanding?

18 A. That is their intent.

19 Q. Are you aware that as reflected in the
20 solid and hazardous waste permit for this facility,
21 that the DOH had condoned the simultaneous
22 construction of the western drainage system and the
23 cell?

24 A. That is my understanding.

25 Q. Right. So as the agency that is

1 responsible for regulating the design and use of the
2 landfill, they essentially had that responsibility
3 in granting the permit; isn't that correct?

4 A. I am not specifically knowledgeable of
5 that exact element of the permit and their approval
6 of that, but that would be true.

7 I would also add, however, that it is an
8 owner and operator's required duty to ensure that
9 they are protecting human health and the
10 environment.

11 Q. Is it also the Department of Health's duty
12 to protect -- isn't that their authority, to protect
13 human health and the environment?

14 A. To oversee that. It is not their duty --
15 in my understanding, in the way that myself as a
16 professional engineer on these projects, I do not
17 take it as their duty to ensure that I have done
18 everything right myself. That is my duty as the
19 professional engineer stamping and signing those
20 plans.

21 Q. But because the facility has to get a
22 permit from this entity, from the Department of
23 Health -- before they can operate, they have to get
24 a permit.

25 A. Yes.

1 Q. So they're obligated to essentially show
2 to the Department of Health what they're going to be
3 doing that would be -- and I think it's the
4 authority of the Department of Health to ensure
5 public health and safety that what they're doing is
6 consistent with that.

7 A. That is true. One thing you would note,
8 though, is that one of the requirements for all
9 plans for landfills for, you know, review is that
10 they be prepared by qualified individuals. That is
11 one of the requirements of Department of Health. So
12 that is one of the things they are depending on, is
13 that the design intent has been followed from the
14 original permit requirements and the original
15 engineering reports for the project, that the
16 construction is proceeding in a proper manner
17 based upon the engineer's intent and then the
18 contractor's application of the plans and
19 specifications.

20 Q. Right.

21 A. So it is essentially both ensuring that
22 they have a review, but they are not, as such,
23 saying that this design, you know, meets -- let me
24 retract that. It's not that it doesn't meet, but
25 that this design -- that they are simply giving it

1 their stamp of approval. They're essentially saying
2 that a qualified individual, a professional engineer
3 is stamping this set of plans and that they -- they
4 cannot necessarily review all aspects of that, so --

5 Q. I think the Department of Health would
6 actually disagree with that representation, because
7 the plans are submitted to an engineer within the
8 Department of Health who reviews it and has to
9 approve those plans before a permit is issued. So
10 it's not only that he's verifying that someone who
11 is qualified has done it, but he's actually
12 reviewing the contents of the plan.

13 But you state that their sole role is just
14 to ensure that someone qualified turned it in and
15 that they don't read the contents?

16 A. I'm not saying that. I'm saying they are
17 reading the content of the plan. They've got a lot
18 to do. They've got a lot to review.

19 The person most knowledgeable of that
20 project is the professional engineer, is the
21 engineer in responsible charge for the project. So
22 what I'm saying is that myself, as a professional
23 engineer stamping and signing those plans, I know
24 that it is -- the burden is on me for ensuring that
25 that design is adequate for the project. I cannot

1 depend on a reviewer, because a reviewer has limited
2 time with those plans and specifications compared to
3 the designer.

4 Q. But the reviewer is responsible for
5 specifically -- would you agree that the Department
6 of Health is overseeing the landfill and in issuing
7 the permit is responsible for not only ensuring that
8 a qualified person submitted it, but that the
9 contents of what is being submitted is acceptable to
10 the Department of Health and acceptable to the
11 extent that it will protect health and the
12 environment?

13 A. Correct.

14 Q. -- which is the capacity of the Department
15 of Health?

16 A. Yes. Yes.

17 Q. So in this particular situation, the
18 Department of Health issued a permit that provided
19 for simultaneous -- essentially allowed for
20 simultaneous construction of the diversion channel
21 and the cell and allowed for the cell to operate.

22 So would you say that essentially the
23 Department of Health had essentially allowed the
24 facility or allowed for Waimanalo Gulch to do this
25 simultaneous construction?

1 A. Well, apparently they did, yes.

2 Q. And that the Department of Health, in
3 their capacity to protect human health and the
4 environment took that into consideration but yet
5 still allowed for the simultaneous construction?

6 A. Yes. If they approved it, they did
7 approve it.

8 Q. You also state that you noticed that there
9 were a number of violations at the facility that
10 were cause for concern.

11 A. Uh-huh.

12 Q. Again, you've testified that the agency
13 responsible for oversight of the operation --
14 design and operation is the Department of Health; is
15 that right?

16 A. Correct.

17 Q. And the Department of Health -- are you
18 aware that Department of Health has weighed in
19 regarding these violations?

20 A. Yes.

21 Q. Are you aware that the Department of
22 Health has testified that at the current facility
23 there are not any continuing concerns regarding the
24 operation of the facility?

25 A. It is my understanding that that's

1 their --

2 Q. -- that the prior violations that you note
3 in your testimony have been resolved to the
4 satisfaction of the regulating authority, the
5 Department of Health?

6 A. That is my understanding.

7 Q. Are you aware that they've also testified
8 that for the events following the December 2010 and
9 January storm events, that they do not plan to take
10 any enforcement action against the facility relating
11 to those two events?

12 A. That is my understanding, that that is the
13 Department of Health's position.

14 Q. So the Department of Health as the agency
15 that's overseeing the design and operation of the
16 landfill, their position is that -- contrary to
17 yours, their position is that these storm events did
18 not exemplify any fault in the design and operation
19 of the landfill -- is that an accurate statement --
20 because they have chosen not to take enforcement?

21 A. I would not state an opinion on that.

22 Q. You wouldn't state an opinion on that why?

23 A. I would need to further review their
24 statement on that.

25 It is my professional opinion in a project

1 that I would design, I would not have taken that --
2 that approach to putting a limited design of the
3 cell as well as operating that cell prior to having
4 storm water controls in place.

5 Q. But you don't disagree that the Department
6 of Health did provide for a permit that allowed the
7 facility to do this?

8 A. I do not disagree with that, correct.

9 Q. You also point to -- I guess you criticize
10 best management or you say that the facility did not
11 follow best management practice; is that correct?

12 A. That's correct.

13 Q. Best management practice with regard to
14 treatment of certain waste, specifically medical
15 waste; is that correct?

16 A. That's correct.

17 Q. Are you aware of, I guess, the statutory
18 requirement for treatment of medical waste in
19 Hawaii?

20 A. Moderately so, yes.

21 Q. The requirements of Hawaii law, do they
22 essentially require other practices that were not
23 implemented by Waste Management of Hawaii?

24 A. I don't believe so. I mean, not to the
25 extent that I have knowledge of what those laws --

1 you know.

2 Q. So you're not saying that Waste Management
3 of Hawaii improperly, I guess, improperly accepted
4 medical waste?

5 A. They properly accepted medical waste. My
6 statement was that given the operation of the
7 landfill, that the medical waste as a special waste
8 should have been handled differently. Not to say
9 that it wasn't handled legally -- there are better
10 ways to handle the waste at the site.

11 Q. But the law in Hawaii doesn't require them
12 to handle it in other ways?

13 A. That is correct.

14 Q. So when you say best management practices,
15 your best management practices aren't necessarily
16 what the law requires?

17 A. That's correct.

18 Q. Your understanding is that Waste
19 Management of Hawaii -- they were acting consistent
20 with the law?

21 A. They were disposing of medical waste as
22 allowed in their permit.

23 Q. As allowed in their permit and as allowed
24 by law?

25 A. I would assume that that is allowed by law

1 if that is allowed in their permit.

2 Q. And as a regulatory agency, again, the
3 Department of Health did not impose best management
4 practices over and above what was required by law;
5 is that correct?

6 A. Apparently not.

7 Q. You also state that you are essentially
8 making a conclusion regarding or making -- stating
9 an opinion regarding the requirement of a
10 supplemental Environmental Impact Statement. Are
11 you aware of the requirements of Hawaii Revised
12 Statutes Section 343-7?

13 A. Not intimately, no.

14 Q. Do you know generally that an appeal of an
15 agency determination as to whether an EIS is
16 required must be filed with the Circuit Court within
17 180 days of decision?

18 A. I am not -- no.

19 Q. So essentially, a review of -- similarly,
20 a challenge to a decision whether or not a
21 supplemental EIS would be required is something that
22 is not for the Planning Commission to decide, but
23 should be properly pursuant to the law before the
24 Circuit Court?

25 MR. CHIPCHASE: Hold on. I'm going to

1 object to that question. That is a legal conclusion
2 and trying to get it in through an expert witness on
3 landfill design, operation and management --

4 MS. VIOLA: But he's --

5 MR. CHIPCHASE: It's a legal statement
6 that I disagree with completely, so we can fight
7 about that position of law, but that's not the
8 subject for him. What he is saying, if I may, is
9 that the facts of the case lead him to believe that
10 the circumstances have changed such that a
11 supplemental EIS should have been required. Whether
12 it is too late to require one is a legal point and
13 that's one we can take up with this body.

14 MR. SANDISON: May I respond to his
15 objection?

16 CHAIRWOMAN PINGREE: Yes.

17 MR. SANDISON: This commission has
18 received a broad range of testimony, allowed
19 cross-examination by Mr. Chipchase of his own
20 witnesses, and certainly to now stand on Rules of
21 Evidence and restrict the City's question would be
22 inconsistent with the commission's broad acceptance
23 of testimony.

24 MR. CHIPCHASE: Chair, just as an aside,
25 I'm not standing on the Rules of Evidence. What I'm

1 saying is you're making a legal argument to an
2 expert witness that is not here to testify about the
3 legal requirements of Chapter 343-7 and the
4 accompanying regulations in Chapter 11 of our Hawaii
5 Administrative Rules. That's my point.

6 MS. VIOLA: But he's opining on whether or
7 not a supplemental EIS is required and that's a
8 legal conclusion.

9 MR. CHIPCHASE: As a matter of fact.

10 MS. VIOLA: That as a matter of fact is a
11 legal conclusion, because he's saying pursuant to
12 the law that a supplemental EIS is required.
13 Therefore, I'm asking if he's aware of the
14 circumstances for a supplemental EIS and whether
15 this is the proper forum to state that opinion.

16 CHAIRWOMAN PINGREE: Excuse me.

17 (Discussion off the record.)

18 CHAIRWOMAN PINGREE: I've been advised by
19 counsel, as I needed to be, if you know the answer
20 to the question, please answer; if not, don't answer
21 -- or say you don't know.

22 A. I do not know the answer to that question.
23 The one thing I would state is -- and what my
24 opinion was based upon was the fact that the design
25 had changed significantly enough from the design

1 report; essentially, having a smaller cell, a
2 different orientation of the cell and that it would
3 appear that that did complicate the construction as
4 well as the protection of that cell from such a
5 storm event.

6 BY MS. VIOLA:

7 Q. Again, though, that is the context of your
8 opinion. As you stated, the Department of Health,
9 as the regulatory agency that's overseeing the
10 design of the cell -- if you were essentially aware
11 of the fact that the Department of Health had
12 approved plans for the construction of the cell,
13 that as the agency who is overseeing the design and
14 the operations, that they did not have concerns and
15 they allowed for the construction to continue,
16 wouldn't you consider that to be reasonable for
17 Waste Management to rely on the Department of
18 Health's approval?

19 A. If they had asked my opinion on that, I
20 would have suggested otherwise.

21 Q. But --

22 A. I mean, it is my opinion that given a
23 design report that they had prepared for the
24 landfill design -- and that's conceptual -- well,
25 it's not fully conceptual; it's somewhat into

1 preliminary engineering -- and then not to
2 necessarily follow that into final design plans and
3 specifications for bidding did not seem appropriate.
4 It was a change, and I would not have done that.
5 And that was -- I was stating my opinion to that
6 fact.

7 Q. But do you acknowledge that the Department
8 of Health as the entity overseeing the design and
9 approving that construction schedule -- wouldn't it
10 be reasonable for Waste Management to rely on the
11 Department of Health?

12 A. Well, first off, to rely on their
13 engineers who designed it.

14 Q. But it's reasonable for them to --
15 reasonable thereafter for those engineers and Waste
16 Management to rely on the Department of Health in
17 approving those plans and therefore to go forward?

18 A. That they -- yes.

19 Q. Mr. Miller, you stated that you visited
20 the landfill yesterday. In your visit to the
21 landfill yesterday, did you observe the western
22 drainage system?

23 A. I did, yes.

24 Q. As far as you know, do you know whether
25 that's complete?

1 A. It appeared to be complete. Also, I
2 reviewed the letter of the middle of December that
3 essentially stated it was essentially complete at
4 that point, with just some minor work, but it was
5 functional at that point.

6 Q. So do you have any concerns about the
7 western drainage system at this point in time, now
8 that it's complete?

9 A. In my looking at it and all -- no, I do
10 not have concerns with it. It appears to have been
11 constructed and the engineers essentially signed off
12 on that.

13 Q. Let me now move to your alternative
14 analysis.

15 (Discussion off the record.)

16 BY MS. VIOLA:

17 Q. This is Exhibit K138.

18 A. Okay.

19 Q. You state at the outset of this report --
20 let me point out to you the specific area. I'm
21 sorry.

22 On page three, under the paragraph that's
23 labeled Comparison of Recycling Efforts with
24 Standard Practices, you state that this is a general
25 or high level overview; is that correct?

1 A. Correct.

2 Q. So in stating that it's a -- or clarifying
3 it's a high-level overview, are you saying that this
4 is not necessarily a comprehensive and detailed
5 study of alternative methods or standard practices
6 with comparisons?

7 A. It is -- true. It is a comparison of the
8 city of Honolulu to other areas in the nation as a
9 whole, but not detailed.

10 Q. In the nation as a whole -- so the
11 standards that you apply are not only to, say, King
12 County that you referenced, but to standards all
13 over the country?

14 A. So what I did is, looking at what the
15 practices are and then looking at urbanized areas,
16 urbanized rural -- with rural aspects that could be
17 comparable to Honolulu. So King County and a couple
18 of other sites -- a couple of other areas were
19 specifically looked at based upon that.

20 Q. So King County and a couple of other
21 areas, that's the point of comparison?

22 A. Okay. Yes. Yes.

23 Q. Not the whole nation?

24 A. No. I mean, there's some points of the
25 whole nation that are tossed in here just, you know,

1 by reference, but --

2 Q. The standard that you're applying, then,
3 is for King County and a couple of other areas?

4 A. Uh-huh. As noted here.

5 Q. Right. And so you're saying that King
6 County and those couple other areas establish the
7 standard that every similar facility has to follow?

8 A. No, I'm not. My point here was to look at
9 Honolulu, look at practices that are being done here
10 and do a reasonable comparison to an area of like
11 population, like size, like mix of urban, rural,
12 suburban and so forth to be able to provide some
13 level of comparison. This was, you know -- true, it
14 was not an exhaustive review of all of the practices
15 out there. But there are some good examples on --
16 particularly on the west coast that, you know, made
17 good comparison.

18 Q. Right. So you're not necessarily -- in
19 comparing it, you're not necessarily concluding that
20 one is better than the other?

21 A. As far as King County versus California?

22 Q. King County versus Hawaii.

23 A. No. I am pretty much saying that King
24 County is better than Hawaii. I think particularly
25 from the standpoint of -- and I don't want to say

1 Hawaii. I want to say Honolulu. In many of these
2 practices, even for composting and curbside
3 recycling, been very slow to be brought here to
4 Oahu.

5 Q. In relation to curbside recycling, you
6 state in your report that the City's residential
7 recycling program is already achieving a high
8 participation and recovery level. That's your
9 conclusion; right?

10 A. That is my conclusion. However, it is not
11 a -- it's a high level, but it's limited. It's a
12 limited area that they're looking at.

13 Q. We're just limiting our focus on curbside
14 recycling.

15 A. Right. Curbside of residential.

16 Q. So you're saying that essentially the City
17 has achieved a high participation and recovery
18 level?

19 A. I did say that, yes.

20 Q. And you also state that in the case of
21 green waste that recovery rates suggest 90 percent
22 participation and an 85 percent recovery level,
23 which also appears to be pretty successful. Do you
24 agree?

25 A. I would agree for residential curbside.

1 Q. And you say that the high recovery rate is
2 consistent with participation and recovery rates
3 realized at comparable locations in California and
4 Washington.

5 A. Yes, for curbside programs.

6 Q. Right. So relating to curbside,
7 essentially what we've achieved in quite a short
8 period of time has been pretty successful?

9 A. It has been successful, but it needs to be
10 applied more widely and there's also a lot of other
11 waste that's being missed. But that's not what I'm
12 stating here, so --

13 Q. I'm sorry. Could you clarify curbside --
14 applying it more widely? Because it's island-wide
15 curbside recycling.

16 A. I don't believe the numbers we had were
17 for all of the systems fully functional at the time.
18 And it's been a while since I did this report, so
19 I'd have to read back through to see exactly how I
20 stated it.

21 Q. But generally, based on what you reviewed
22 and what you stated here, the curbside program is
23 pretty successful?

24 A. The residential curbside is reasonably
25 successful.

1 Q. And then in relation to King County, does
2 King County have a waste-to-energy facility?

3 A. It does not.

4 Q. So in terms of overall landfill diversion,
5 actually, the City and County of Honolulu is doing
6 better than King County; is that accurate?

7 A. As landfill diversion, correct.

8 Q. Right. So for the purpose of landfill
9 diversion, diverting as much MSW or waste from the
10 landfill as possible, the City of Honolulu is
11 actually in a better position than King County?

12 A. For diversion of waste from the landfill,
13 yes.

14 Q. So instead of -- in place of
15 waste-to-energy, a waste-to-energy facility, then,
16 is King County mostly land-filling?

17 A. Of their non-recycled, non-composted
18 material, yes, it's landfilled. But they have a
19 higher overall recycling rate than -- non-energy
20 recycling rate than Honolulu does.

21 Q. But a lower landfill diversion rate?

22 A. That is correct.

23 Q. You also criticized that the City has not
24 been able to reuse ash; is that accurate?

25 A. That's correct.

1 Q. Let me point you to your study again. On
2 page six of your study -- and this is at the end of
3 the paragraph labeled Recycling of Residential (sic)
4 Waste and Ash from the H-POWER facility.

5 A. Uh-huh.

6 Q. You acknowledge that the division -- I'm
7 assuming by division you mean the DOH hazardous
8 waste section -- has not yet designed a beneficial
9 use policy for any materials, including bottom and
10 fly ash.

11 A. That's correct.

12 Q. You also state, in the next paragraph,
13 that there are no nationwide standards in the United
14 States, that less than five percent of the
15 waste-to-energy ash is beneficially used.

16 A. That's correct.

17 Q. So there are no state or nationwide
18 standards for use -- reuse of ash?

19 A. That's correct. That's true, not a
20 national standard. That is an overall problem in
21 this country. And I will state that. You know, for
22 -- what was interesting and why we specifically
23 noted it there is that is a definite push in Europe,
24 is to reuse the ash.

25 Also, the other point is that fly ash is

1 more heavily reused in other parts of the country
2 and since the bottom ash and fly ash are co-mingled
3 here coming out of H-POWER, that is not an
4 opportunity here, to actually reuse the fly ash, as
5 -- particularly as a cement amendment, concrete
6 amendment.

7 Q. So this criticism of the City as not being
8 able to reuse ash is a criticism that you apply to
9 most cities in the nation then?

10 A. I would. However, I think it's -- the
11 City has made a point of saying that they want to
12 recycle this material.

13 Q. "The City," meaning the City and County of
14 Honolulu?

15 A. Yes -- and that it has been stated in the
16 solid waste management plan and other places. And
17 so the point being made here is that not moving
18 forward very quickly on that desire to find
19 alternative uses for the ash.

20 Q. But that's consistent with almost every
21 other city in the nation?

22 A. The thing is, I'm not sure if every other
23 city is saying they are trying to do something about
24 it.

25 Q. So you're criticizing the City and County

1 of Honolulu for having good intentions by saying
2 they want to reuse ash?

3 A. Having good intentions and not following
4 through. That is what my --

5 Q. How can they follow through, though, if
6 there are no standards anywhere in the nation?

7 A. Because there are standards -- there are
8 uses in other parts of the nation and in other parts
9 of the world. It is really looking at it from the
10 standpoint if you're serious about looking at
11 alternative ways of recycling, of reusing materials,
12 you will come up with a standard.

13 Q. Despite the fact that there are no
14 standards and the Department of Health is not
15 approving any of their suggestions?

16 A. And that's -- and that's what it comes
17 down to; is it getting into a meaningful dialogue
18 with the Department of Health and moving forward
19 with a plan. I did not see that in anything that I
20 reviewed, that the City was diligently evaluating
21 those options.

22 Q. So if you were to learn that the City has
23 made proposals to the Department of Health, would
24 you change your opinion?

25 A. If I took a look at those and that they

1 were real serious approaches.

2 Q. And you also talk about biosolids -- or
3 you criticize the City's policy with biosolids; is
4 that right?

5 A. I do.

6 Q. Are you aware that the City has entered
7 into a contract with a facility to convert biosolids
8 to fertilizer?

9 A. I am.

10 Q. Are you aware that the City is moving
11 toward diverting all biosolids or sewage sludge from
12 the landfill?

13 A. That is my understanding. And actually,
14 that came -- that understanding came to me after the
15 timing of this report. And I would say it is --
16 quite honestly, it's incumbent upon the City to
17 follow through on that and to ensure that those
18 facilities are in place so that this resource -- and
19 what's interesting about it is it's not only a
20 resource to be used by the community, but it's also
21 a problem at the landfill. So here we can take care
22 of a problem as well as actually develop a resource,
23 and honestly, ensure that the City is diligent in
24 following through on that, and it really shouldn't
25 take more than this year or next to complete that.

1 My understanding is that that facility will be
2 operational next year.

3 Q. Are you also aware that the City is
4 looking into burning biosolids and --

5 A. That is my understanding. Although I
6 didn't have a full context for that yet, so --

7 Q. So with those additional understandings
8 that you didn't have prior to drafting this report,
9 would you change any conclusion at this point?

10 A. I would conclude that the City is pursuing
11 beneficial use of the biosolids. It's really in the
12 details of ensuring that there is follow-through,
13 that there is diligence. And I only state that from
14 the fact that in the past many actions were taken
15 to, for instance, send MSW to the mainland or to
16 look at other options for handling of biosolids and
17 they didn't follow -- they didn't come to
18 conclusion, so --

19 Q. Are you aware that the contract to ship
20 did not include biosolids?

21 A. No. I am. I'm just stating that as an
22 example of, you know, good intentions but it not
23 happening ultimately.

24 Q. Right. But the reason that it -- are you
25 aware that the reason that the contract to ship the

1 waste to the mainland wasn't due to any lack of
2 effort on the part of the City --

3 A. I do understand that.

4 Q. And you also state in terms of alternative
5 technologies that you are saying that the City is
6 miscalculating its -- I guess its economic
7 projection for plasma gasification.

8 A. Yes.

9 Q. And you're saying that's based on the fact
10 that the City didn't take into account the cost and
11 expense to sterilize medical waste?

12 A. Correct. In my evaluation of the
13 calculations, it did not appear that that was being
14 considered as a cost on the disposal side of medical
15 waste.

16 Q. As a cost to the City?

17 A. As a cost -- that is a community cost.
18 Essentially, if you're not -- if you're going to
19 another means of handling the biomedical waste, such
20 as plasma arc or something like that, there's not a
21 need -- in my understanding, there's not a need for
22 autoclaving of that material. So that should
23 actually be -- that is not a cost that is going to
24 be incurred by the generators of those wastes, so in
25 fact, that needs to be considered within the overall

1 calculation of handling of the medical waste.

2 Q. But if the overall calculation is related
3 to the City's expenditure, isn't that irrelevant?

4 A. No, it's not. Because essentially what
5 you're able to say is that if a generator does not
6 have to autoclave, they'll have an opportunity to
7 actually pay more to the City for an operation that
8 goes to a plasma arc gasification project, because
9 they don't have to autoclave. Autoclaving is an
10 expensive proposition. It's a lot of handling,
11 processing, you know, through another private
12 vendor, but still it is a cost of that overall waste
13 stream process and it needs to be brought into the
14 calculation.

15 Q. But in terms of plasma arc and -- plasma
16 arc gasification and cost, are you aware that it's
17 very expensive to operate the plasma arc facility?

18 A. I am. However, it's also expensive to
19 take refuse to the -- to autoclave medical waste and
20 then send it to the landfill and properly handle it
21 at the landfill.

22 Q. But you note in your report that you have
23 to have a certain amount of medical waste to make
24 plasma arc gasification, I guess, reasonable.

25 A. True.

1 Q. Is there enough medical waste in Hawaii to
2 justify a plasma arc expenditure?

3 A. In the past, apparently, the calculations
4 -- my understanding showed that there was, but the
5 cost did not work out. But that's where we raised
6 the point that then the cost of autoclaving should
7 be brought into account to those calculations.

8 Q. So you're saying the cost of autoclaving
9 would essentially balance out the expenditure for a
10 plasma arc gasification facility?

11 A. I am not exactly sure. But it was not
12 considered.

13 What I'm saying is that the City did not
14 evaluate that or that was not part of the
15 calculations. It was not a full evaluation of those
16 costs.

17 Q. But you don't disagree that it's a very
18 pricey and not necessarily dependable technology?

19 A. I would not state on -- I would not make a
20 statement on the dependability of it. I would make
21 a statement that it is expensive, but so is
22 autoclaving and processing -- pre-processing of
23 medical waste prior to it going to the landfill.

24 Q. But you state in your report, page 13,
25 that currently there are no large-capacity municipal

1 gasification/vitrification installations based on
2 current arc plasma systems.

3 A. That's right.

4 Q. So there aren't any large-scale-capacity
5 facilities like this anywhere else, but you think it
6 should be appropriate for the City and County of
7 Honolulu?

8 A. What I am saying is that it should be
9 properly evaluated, and I don't believe it was,
10 because the economics were not properly evaluated
11 and all the technologies out there were not
12 necessarily evaluated. I did not do a fully
13 exhaustive study of all of the plasma arc
14 technologies that are available.

15 Q. But you state that there are no large-
16 capacity municipal --

17 A. I did state that.

18 Q. You state that there are no large-capacity
19 municipal gasification installations anywhere else
20 on the mainland.

21 A. And that is large scale. There are other
22 operations that are possibly of the scale that could
23 be used just for medical waste, and so -- but again,
24 this is an overview. I'm raising these questions
25 because I don't believe that the City did an

1 adequate evaluation of the technologies or an
2 adequate calculation of the economics of those
3 technologies.

4 Q. You're not saying -- because you didn't
5 conduct the study, you're not saying that that would
6 necessarily be feasible?

7 A. I'm not necessarily. But again, I'm not
8 necessarily saying -- I'm saying that they didn't
9 necessarily do the proper evaluation of the
10 alternatives to be able to make the conclusion that
11 they made.

12 Q. All right.

13 CHAIRWOMAN PINGREE: We need to take a
14 break. So why don't we resume in ten minutes?

15 (Break taken.)

16 CHAIRWOMAN PINGREE: We're back on the
17 record.

18 MS. VIOLA: Thank you.

19 BY MR. VIOLA:

20 Q. I just have a few more questions.

21 Relating to your site selection study --
22 and that is Exhibit 147 -- your testimony was that
23 essentially in order to do a comprehensive site
24 selection that would come up with a recommendation
25 that would be feasible, that it would require

1 perhaps a different process; is that right?

2 A. That's correct.

3 Q. If the site selection were not to
4 essentially come up with a selection that would be
5 dictated to the City, would that change your
6 opinion?

7 For example, the site selection for this
8 particular site selection is not to make a -- not to
9 dictate a site, alternative site, but to provide
10 alternatives to the City. And also, the goal, as
11 stated, is it's a community-based site selection
12 process, so not a geotechnical, that type of
13 evaluation.

14 So in the context of those two
15 considerations, that it's purely advisory and that
16 it's a community-based process, does that change
17 essentially your evaluation of the value of the
18 committee or the committee's work?

19 A. Absolutely not. I would really question
20 the idea of bringing together a committee that is
21 only advisory from the standpoint that this may or
22 may not be used. It is my understanding from the
23 2008 solid waste management plan, as well as other
24 statements by the City, that there is an intent to
25 site a new landfill in the city -- or on the island.

1 Based upon that, if I am a commission member, I want
2 to have a rigorous process that truly works -- works
3 through an approach that will get us to a site or
4 sites, you know, that can then be further evaluated
5 in an environmental review process. It is no point
6 in going through all of this effort, this time, the
7 energy, the volunteer energy, the cost and expense
8 of a siting study if it is not the intent to be used
9 and actually make a decision off of that.

10 It is my understanding that the point here
11 is to make a decision. I mean, it is to site a new
12 facility, and so that was my understanding, and so
13 that was what -- I was reviewing this processes
14 based upon that. And based upon that, I looked at
15 this and I'm thinking it does not at all follow
16 through really the standard of practice and really
17 what I would elevate for Hawaii has got to be higher
18 than that.

19 I mean, you're on an island. You have
20 limited resources from the standpoint of land, of
21 land that you want to apply to this. However, there
22 are sites that are out there, but you need to be
23 aggressive and rigorous in how you evaluate those
24 sites, and this does not lay that out at all. You
25 know, that was kind of the context I came away with

1 when I reviewed the process.

2 And I guess what was telling and I noted
3 it before, in my presentation, is that the process
4 was laid out pretty well in the solid waste
5 management plan. You know, this is the way you go
6 through it. And then it was like that's tossed out
7 the window, let's come in with something else. And
8 now what you're up to is essentially almost
9 reopening the process, because now you've said,
10 Well, geez, we only came up with two sites, I guess
11 we've got to start changing how we're going to
12 pursue this.

13 Well, essentially what you've done is
14 you've started back from square one in doing that
15 and you're having to look at this broadly again.
16 And I guess what I would say -- I'm not sure if the
17 current process can be fixed as such and that you
18 shouldn't take a step back and say, We had a process
19 laid out in the solid waste management plan, how can
20 we kind of re-work the current process so we kind of
21 get back to that and have that rigorous approach to
22 the siting process you owe to the citizens of the
23 city, but also, especially to the volunteers who put
24 their time and effort into this process.

25 Q. But if you look at the contents of the

1 committee, those are not geotechnical experts. When
2 you say further review, you say you limit it to
3 environmental review, but this was not a committee
4 that was formed to do a geotechnical analysis.

5 A. I am not stating geotechnical analysis in
6 any way. That's when you get down to specifics of
7 the site. What I'm talking about are social issues.
8 I'm talking about land use issues. I'm talking
9 about public concerns about aesthetics and about,
10 you know, proximity to the sites, as we laid out in
11 our evaluation, but also how truly it was laid out
12 in the solid waste management plan. I'm saying you
13 need to have that level of rigor. That's not
14 getting down to the technical aspects of
15 geotechnical or exactly how you'll design and build
16 this on the site.

17 You know, we as engineers always like to
18 say we can build anything anywhere. But that's not
19 the point. What you've got to do is you've got to
20 site this thing, come up with the location you want
21 to put it; maximum environmental protections with
22 that site, but also that covers the public and
23 community concerns. That has not been provided in
24 the process that's been laid out today.

25 Q. I think that the committee members would

1 probably disagree with that opinion, because I think
2 that the factors they are considering are community-
3 based, like you said. They're talking -- the
4 factors that they have considered are proximity to
5 development. They have considered environmental
6 consequences. They have considered infrastructure.

7 Are you saying that those considerations
8 haven't come into play?

9 A. I am not. What I'm saying is that I
10 believe that the City and the consultants have done
11 a disfavor to the committee by not taking their
12 desires and their considerations for the criteria
13 and applying them in such a manner that allows for a
14 rigorous evaluation of sites that are out there; as
15 I noted in my figure up here, kind of going for the
16 broader look at the sites, down to specific
17 locations within that.

18 And really what it comes down to, it's
19 great to have this public participation. That's
20 what you want to have from the committee like this.
21 And one committee member that I talked to about it
22 -- he was concerned that that wasn't part of it,
23 that, you know, all of their work hadn't necessarily
24 been applied properly by the consultant and by the
25 City staff. So I do not want to disparage the hard

1 work of the committee members at all. But I think
2 it's more that application and putting it into a
3 process that then can truly evaluate those sites
4 that are out there. I don't see that happening and
5 I don't see it as a process that will truly be able
6 to come up with a decision point for both the
7 advisory committee, as well as for the council
8 eventually.

9 Q. Who did you speak to? Which member did
10 you speak to?

11 A. David -- I forget his last name.

12 Q. Arakawa?

13 A. Excuse me?

14 Q. Arakawa?

15 A. Yes.

16 Q. Was it Mr. Arakawa's feeling -- and you're
17 saying that Mr. Arakawa's feeling was that the
18 committee's intent was not essentially, I guess,
19 accomplished with the work of the committee?

20 A. I wouldn't say with the work of the
21 committee. I would say with the work of the
22 consultants applying the work of the committee. And
23 so it was really just kind of that feeling that, you
24 know, a lot of hard work done, but then now we're
25 kind of at this place of having to step back and

1 evaluate these sites again based upon new criteria
2 that have been added or a review of -- re-evaluation
3 of those criteria. Those are the types of things
4 that need to be worked out initially in the process,
5 as opposed to way down the road.

6 Q. Isn't the expanded -- I guess the expanded
7 review that they were doing to look at additional
8 sites, not to re-apply criteria to existing sites?
9 Aren't they trying to expand their considerations?

10 A. My understanding is that it is to open it
11 up to more sites. However -- so as to be less
12 restrictive. However, I think that is kind of a --
13 more of a case of them not having it properly done
14 to begin with, and I guess it's my professional
15 opinion in evaluating the process to date that it
16 would probably be better and probably be faster to
17 actually take a step back and ensure that you have a
18 -- have a process laid out. It should not take this
19 long.

20 And where it's going right now, my concern
21 is that all the hard work of the committee is going
22 to be for naught, because there will be -- it won't
23 be seen as the rigorous evaluation of the
24 alternative sites that it should have been. So in
25 the environmental review process, you know, it will

1 not be -- it won't be seen as, you know, the proper
2 alternatives reached and then studied further.

3 Q. But if this is an additional
4 recommendation and it won't necessarily go directly
5 to environmental review, could the recommendation
6 still be evaluated and still essentially satisfy
7 your concerns?

8 A. No. My feeling still is that if you're
9 going to have a siting process, you're going to take
10 the time for that, you're going to use City staff
11 time, you're hiring a consultant, you're using the
12 time of a volunteer committee to assist you, you
13 need to have a rigorous process that truly gets to
14 viable alternatives at the end of it; not just,
15 Well, we went through the steps.

16 And I would say the steps weren't proper,
17 but at the same time, if it's just advisory, if I'm
18 on an advisory committee -- and I've been on many
19 advisory committees as a public citizen and
20 volunteering that time -- the last thing I want to
21 do is be putting my time into something that, well,
22 it's just advisory, we may take it or not. You
23 know, it's really because -- in a role as an
24 advisor, I want to be able to make a true statement
25 and true advice to the ultimate decision makers.

1 Q. In expanding their consideration as
2 they've recently done, as you've stated, don't you
3 think they have taken a step back to reevaluate to
4 essentially enable them to broaden the
5 considerations?

6 A. They have. However, the -- it is so
7 piecemeal and not taking into effect the weighting
8 and the ranking of those criteria and then kind of
9 putting it in the context of the social, the
10 economic, the traffic impacts, for instance, and the
11 environmental. It hasn't been done. It's kind of
12 piecemeal around and it really needs to ensure that
13 all of those are evaluated here to have a
14 comprehensive, rigorous evaluation of the
15 alternatives.

16 Q. So how do you understand that the process
17 went awry? What happened specifically that you can
18 identify as representing that the siting committee
19 has failed or the siting committee's objectives have
20 failed to be met?

21 A. Well, number one, not following their own
22 solid waste management plan.

23 Q. How?

24 A. By not using a rigorous process that was
25 laid out in the solid waste management plan --

1 Q. How?

2 A. -- and the categories of criteria to
3 follow for that.

4 Q. What criterias were different?

5 A. What were they?

6 Q. Yes.

7 A. They're listed in the report. It's
8 essentially not evaluating the issues of -- and I
9 don't remember all of the specific ones, but
10 particularly some of the issues with regards to
11 visual and aesthetics and to how the groundwater
12 protection will be applied, and those types of
13 things.

14 It's really stepping back and -- I'm not
15 saying that everything that was in the solid waste
16 management plan is exactly what those criteria
17 should be, but it was a good starting point that
18 would have been a place for the committee to start
19 with their process, and because ensuring that you're
20 looking at both, obviously, these public concerns
21 and these community concerns, but also all of these
22 others do come into play in the siting of a
23 landfill.

24 Q. You're saying that they didn't follow the
25 solid waste management plan?

1 A. That's correct.

2 Q. How so? Because they did basically adopt
3 a lot of the criteria that the solid waste
4 management plan recommended.

5 A. They developed a lot of them, but then
6 they did not evaluate and base the criteria and the
7 criteria weighting and ranking based upon a lot of
8 the concepts in the 2008 plan and came in with some
9 rather odd approaches to applying the criteria and
10 weighting of the criteria that didn't make sense.

11 Q. I'm sorry. You're saying that the solid
12 waste management plan dictated how all of the
13 criteria were to be weighted?

14 A. No, I'm not. What I'm saying is that it
15 laid out a process and it was a good process in
16 which to start a siting -- you know, to start this
17 specific siting process; not to say that it laid out
18 everything that the committee needed to follow.

19 But I think it's really important to --
20 again, one of the things -- and I'll step back one
21 moment just for the panel here. In doing solid
22 waste management planning and then into facility
23 siting and design, it is really important that you
24 kind of take this holistic look within the
25 comprehensive plan; not like you get down into the

1 weeds in the comprehensive plan, but you at least
2 lay out how we're going to approach different
3 things, such as recycling or biosolids management
4 and landfill siting, and then you use the actual
5 siting effort itself to start getting into the
6 weeds, to start driving down what are the other
7 community concerns, other public concerns.

8 I did not see that happening in that
9 transition from the solid waste management plan to
10 the siting process. And one of the concerns that I
11 had was that it seemed to take so long going from
12 the solid waste plan, you know, which was completed
13 in 2008, 2009, to when the actual siting process
14 started early last year; I mean, here, you know, a
15 good two years later. A lot of that memory that was
16 out there, I think, was lost and wasn't necessarily
17 brought back into the process.

18 Q. So can you be more specific, because it
19 seems like -- would you disagree that the language
20 of the solid waste management plan is prospective
21 and it mentions general principles but it doesn't
22 dictate a procedure?

23 A. It does lay out -- and I don't have it in
24 front of me, but it does lay out the process. One
25 of the concerns I had is that it would appear that

1 with the current siting effort, that kind of the
2 universe of criteria were not necessarily all
3 considered. Some items were kind of double-counted,
4 such as the issues of threatening endangered species
5 and wetlands, for instance, and other things were
6 not considered that should have been considered.

7 I think what it really comes down to is
8 ensuring that you step back and you have a more
9 comprehensive look at how those criteria are being
10 developed, that you -- to a degree that you identify
11 them down in specific categories, such as
12 sustainability or environment and transportation, or
13 however those might be, whatever is the concern of
14 the community, to ensure that the overall weightings
15 of the public are raised in that. I did not see
16 that happening in the current siting effort.

17 Q. Except that those criteria are being
18 considered by the committee.

19 A. They are not, not to the degree that they
20 should be and not -- and quite honestly, not to the
21 point of weighting their importance against other
22 criteria and also kind of as groups of criteria.
23 That was not placed here.

24 Q. But it was the committee's objective or
25 the committee's role to weight the criteria. They

1 were presented with all the criteria that you
2 mentioned and it was the committee's responsibility
3 to give weight to the -- what they considered to be
4 the necessary weight for those criteria.

5 A. And my understanding is that, though -- is
6 that that was not done prior to then applying these
7 and so -- I guess what I would say is that there's
8 got to be some true leadership here from the
9 professionals who have gone through this process. I
10 am not going to throw a committee of volunteers
11 under the bus. I think they have done good work. I
12 don't think the City or the consultant has provided
13 the leadership necessary to really provide for the
14 -- for the rigorous siting effort this required
15 here.

16 Q. Would it surprise you to learn that the
17 committee has not applied the weighting criteria to
18 the sites as of yet?

19 A. Could you repeat that, please?

20 Q. Would it surprise you to learn that the
21 committee has not applied the weighted criteria to
22 the sites as of yet?

23 A. That would surprise me.

24 Q. They have not. My representation to you
25 is that they have not applied the criteria at this

1 point. They're still considering what sites to
2 apply the criteria to. That's why they broadened or
3 they expanded the consideration of sites.

4 If that was the case, if that indeed is
5 the case, would you change your criticism of the way
6 that this committee has been handled, if they have
7 not essentially prematurely applied --

8 A. I would not, because I think that
9 weighting should occur prior to going through all of
10 this process of exclusion, because it really is what
11 allows you to evaluate what truly is important and
12 then also to the importance of what is important to
13 exclude. Without having that discussion and that
14 application of weighting of the criteria, I believe
15 you're really losing the point of the whole process
16 and being able to hone it down in these -- you know,
17 in this next stage, down to the limited number of
18 sites.

19 Q. But Mr. Miller, you just testified that
20 they had already applied that weighted -- the
21 weighted criteria and so therefore it was premature.
22 But now you're saying they shouldn't apply the
23 criteria yet or they should have applied it earlier?

24 A. What I am saying -- and I don't believe I
25 did say that they have already -- have applied the

1 weighted criteria. I do believe that the criteria
2 need to be fully established. The weighting of
3 those criteria need to be established. The ranking
4 within a criteria -- so essentially what you're
5 saying is that a criteria is established for
6 aesthetics. Let's say it's distance from the site
7 and your visual observation of that site. Right
8 now, the criteria is based on this somewhat
9 arbitrary deciles system. What's more important is
10 truly what is visual to the community. What are
11 they seeing. That has not been applied here in a
12 good ranking within a criteria, and so -- and that's
13 the type of support and technical input that you
14 need from your consultant and your City to help the
15 advisory committee along. So what I'm saying is
16 that that is a process that should happen prior to
17 applying the criteria.

18 Q. And you're saying that has not happened?

19 A. My understanding is that has not happened.

20 Q. But you said that you would be surprised
21 to learn that the criteria has not been applied yet.
22 Isn't that what you stated?

23 A. Not that the criteria hasn't been applied
24 yet but that the weightings haven't. And so either
25 I misunderstood you or you misunderstood me. It's

1 more that I'd be surprised that the weightings had
2 not been established for the criteria, and it's not
3 so much that I'm surprised that it hasn't happened.
4 It's more that in a good siting process, it should
5 have been completed at this point.

6 Q. So you're saying that the City and/or the
7 Mayor should have dictated the criteria and the
8 weighting for the committee?

9 A. I did not say that. What I am saying is
10 that the City, working with their committee, should
11 establish some criteria, ascribe -- establish how
12 sites will be ranked against those criteria and then
13 those criteria should be weighed, both within
14 categories and then individually within those
15 categories, as to what is important to the
16 community, what is important to the advisory
17 committee members. That's how you use an advisory
18 committee in a siting process. That's what I'm
19 saying. I have not seen that happen here.

20 Q. You're saying that the committee hasn't,
21 number one, established criteria, determined how the
22 site should be ranked, and number three, weighted
23 that criteria? They haven't done any of those three
24 objectives?

25 A. I said what I said. I'm not sure exactly

1 where you're coming from and what you're saying
2 there.

3 Q. Well, would it be surprising to you to
4 hear from a committee member that they have actually
5 established criteria and essentially are going to
6 apply the criteria to ranked sites and have weighted
7 the criteria; they've actually accomplished all
8 three -- or are seeking to accomplish all three of
9 the goals that you've stated?

10 A. I would hope those are the three goals
11 they are going to achieve. My concern is that given
12 the criteria and kind of the -- somewhat of a
13 disjointed list of criteria and then bringing in new
14 criteria, that it hasn't been fully evaluated what
15 those should be, how they should be weighted, what
16 the rankings within the criteria should be. That's
17 what I'm saying.

18 Q. You're saying they haven't weighted their
19 criteria yet?

20 A. I am going off of the committee memories
21 that are provided to the public and have been
22 provided to me to review. I have not seen a list of
23 criteria, how sites will be ranked against those
24 criteria and the weighting of those criteria against
25 one another.

1 Q. So you're not saying that they haven't
2 done that then, because you haven't seen it?

3 A. I have not seen it.

4 Q. Okay. If you haven't seen that they -- or
5 you haven't confirmed that they haven't accomplished
6 these objectives, why would you characterize the
7 committee's action so far as not being rigorous?

8 A. I would expect that in the committee
9 meetings and the memory of those committee meetings
10 would state what they've done and that those
11 criteria would be out there, they would be open for
12 -- you know, for the committee to review as well as
13 a public reviewer would be provided out there. I
14 have not seen them.

15 Honestly, all of the siting efforts I have
16 been involved in have been -- have had those
17 completed at this point. That is kind of the
18 standard practice. I am not seeing this following a
19 standard rigorous practice to ensure that
20 ultimately, you know, a defensible process is
21 followed through on and defensible sites are then
22 selected out of that. That's what decision makers
23 are looking for, a process that truly brings to them
24 fully vetted sites based upon criteria and ranking
25 that allows them to make a decision, both at the

1 committee level as well as ultimately to the council
2 and the mayor.

3 Q. I just want to clarify. Your criticism of
4 the site selection process is based on the fact that
5 you, based on what you reviewed, haven't seen
6 evidence of accomplishing the three goals that you
7 identified earlier -- that is the goal of
8 establishing criteria, weighing the criteria, and
9 determining how the sites will be ranked based on
10 that criteria -- is that correct?

11 A. That is correct from the standpoint that I
12 have not seen that and given the criteria that I saw
13 and the weightings -- the rankings of those, many of
14 them just by this arbitrary decile approach of one
15 to ten, you know, scoring, that is not a good
16 approach to take to the ranking of sites against
17 these criteria and a list of criteria that's not as
18 exhaustive as it should be to come to this -- to a
19 good solid decision. That's what I'm saying.

20 Q. But you haven't seen all of the work of
21 the committee as of yet, but that's your testimony,
22 as well; right?

23 A. I have not seen all of the work, because
24 it has not all been provided. But then in my
25 conversation with David yesterday, I also got a

1 feeling from him that he was frustrated with the
2 process and that he didn't feel that it was reaching
3 conclusions based upon, you know, a good evaluation
4 of the sites and a good, necessarily fully
5 exhaustive list of criteria.

6 Q. Has it been your experience that there has
7 been differing views of different committee members?

8 A. I would imagine there would be.

9 Q. So Mr. Arakawa's impressions don't
10 necessarily reflect the impressions of the entire
11 committee; is that accurate?

12 A. I do not know.

13 Q. Because you haven't talked to any other
14 committee member?

15 A. Correct. I have not talked to any other
16 committee member.

17 Q. So as of this point, without talking to
18 all the committee members and without talking to
19 essentially the City consultant, I assume, as well
20 as not seeing the completion of the process, or the
21 continuation that the site committee is still
22 meeting and still working, you cannot definitively
23 state that none of the goals have been accomplished?

24 A. What I will say is that where the
25 committee was at prior to the completion of our

1 report in the middle of December, the list of
2 criteria, the ranking within those criteria and the
3 weighting of those criteria was not following best
4 practices for siting effort. The memory of meetings
5 I have seen since then do not bring me to make any
6 different conclusion than that.

7 Q. But you have not spoken to all of the
8 committee members?

9 A. I am working off of a committee memory
10 that should be taking into consideration those
11 meetings and the opinions of committee members that
12 are made at those meetings.

13 Q. But you're also basing this on your
14 discussions with Mr. Arakawa. That's one committee
15 member.

16 A. And that is just, you know, that one
17 statement. That is not what I am making my larger
18 evaluation of the process on. It is -- because my
19 conclusions came well before my conversation with
20 him. They came from evaluation of the process,
21 evaluation of the criterion that were developed
22 through the November meetings and then, you know,
23 they have not changed since the later meetings after
24 that.

25 Q. Do you feel that in similar situations,

1 based on your criticism of the committee work, that
2 in similar situations that this committee would come
3 up with a recommendation that the City would be
4 bound to follow or that further review of the sites
5 would not be necessary?

6 A. The way that I would use a -- I'm not
7 exactly sure how the council and mayor use an
8 advisory committee. You know, it may be different
9 in different applications. Typically, what would
10 come out of an advisory committee is advice. But,
11 you know, most of the time that's taken pretty
12 solid, because you've pulled these citizen
13 volunteers together for a purpose. They're
14 representing the community. They're representing
15 and working with -- they're representing, you know,
16 kind of a multitude of opinions out there in the
17 community, and that's what you as a decision-making
18 body, the council and mayor, want to be receiving
19 from an advisory committee.

20 I'm not saying that what comes out of this
21 is -- requires no further review. What ends up
22 happening is that -- typically, is that you're
23 taking two or three sites into the environmental
24 review process; the siting study got you to that
25 point of having two to three sites for the

1 environmental review process; and that then you have
2 the rigorous evaluation of the sites in that
3 environmental review process.

4 Q. So you're saying that the committee, as
5 far as you can see, has not been able to get their
6 point across in terms of concerns, community
7 concerns in siting of the landfill?

8 A. I did not say that.

9 Q. So from what you have seen, would you
10 think that the criteria and what they've done so far
11 has essentially accomplished that objective, to
12 essentially communicate -- the community, as
13 represented by the committee members -- their
14 concerns relating to the new landfill?

15 A. They have not completed their work as a
16 committee, from my understanding and from review of
17 the last meeting memory and that it will take
18 completion of that. What I'm saying is that they
19 are not at a point -- and I do not believe they have
20 necessarily all of the support that they need, given
21 a good, rigorous siting process, which is what they
22 need, and the City and the consultant staff who can
23 support them in making that decision.

24 Q. Okay. So you acknowledge that the process
25 hasn't been completed yet and that they still have

1 an opportunity essentially to accomplish their goals
2 of identifying community concerns in the selection
3 or in the recommendation for other landfill sites?

4 A. I believe that they can. However, at the
5 same time, I believe that the criteria do need to be
6 further evaluated. The ranking -- as I've been
7 stating, the ranking of those criteria need to be
8 further evaluated.

9 This arbitrary decile ranking is not the
10 proper way to do it. I've never seen that before in
11 a siting effort; nothing that we've done or other
12 projects that we've looked at. And I believe it's
13 only fair to the committee that, you know, the
14 consultants bring and the City brings, you know, a
15 more proper and rigorous approach to the siting so
16 that they can apply their -- kind of their community
17 institutional knowledge -- and I say that just kind
18 of from the community standpoint -- community
19 knowledge to this process.

20 Q. I'm sorry. I think I represented that I
21 was going to have only a few more questions, but I
22 actually do only have a few more questions at this
23 point.

24 You testified that by 2013, you think that
25 Honolulu will no longer need a large general purpose

1 landfill. What do you mean by that? What do you
2 mean by general purpose?

3 A. So when I say general purpose and it's a
4 municipal solid waste landfill -- a municipal solid
5 waste landfill is essentially taking the traditional
6 elements of the solid waste, so that is those things
7 that are not recycled.

8 I would say that there can be a much more
9 rigorous recycling effort in this community.
10 Residential curbside is only part of it. Commercial
11 recycling, commercial composting, commercial food
12 composting -- I have not seen that here nearly as
13 rigorous as it needs to be in this community. The
14 hotel I'm in right now -- recycling? No. I set my
15 bottles next to the waste. I'm hoping that it gets
16 recycled. I hope my newspaper gets recycled. I
17 don't believe it will be. These are the type of
18 activities the City needs to take on to reduce that
19 amount of waste going into the landfill.

20 Now, when I say no longer needing a
21 general purpose landfill, the fact is that you do
22 have a waste-to-energy project here in the
23 community. It's going to get a new boiler, under
24 construction now. That should take on even more of
25 this waste. It can take on bulky waste. It can

1 take on other wastes that have been -- you know, had
2 to be bypassed in the past. Those should no longer
3 have to go to the landfill.

4 There is absolutely no reason why
5 biosolids, sewage sludge -- in many cases not very
6 much treated at the same time -- no way should those
7 have to go to a landfill. They are resources, as I
8 noted before. These are nutrients. These are what
9 people pay money for to put on their land, both
10 agricultural as well as residential and commercial
11 landscaping. These are resources that need to be
12 saved, saved for the community and processed for the
13 community. These are being finally brought to bear
14 by the City with the new in-vessel processing of the
15 biosolids and food -- somewhat food and other
16 organic waste, as well as the Sand Island plant --
17 my understanding, possibility expansion of the Sand
18 Island biosolids plant, as well. That needs to
19 happen. There is absolutely no reason those
20 materials should go to landfill anymore. That is
21 not the standard practice across the country. It
22 should not be the standard practice here.

23 As I noted before, you're on an island.
24 You know that. I don't need to tell you that.
25 There's almost a standard of care -- and I've always

1 felt that here -- a standard of care of, We can do
2 better, we should do better, we need to use the
3 resources we have at hand here to do better and that
4 why go by just, you know, kind of what the -- you
5 know, what the state requirement is or the federal
6 requirement is when in fact you have options that
7 are available to you that will get you there and
8 truly can get you there economically.

9 So that's where I'm saying there's no
10 further need for a general purpose MSW, municipal
11 solid waste landfill.

12 Q. When you say general purpose, what do you
13 mean? Is that a caveat? Are there wastes that
14 cannot otherwise be disposed of except through a
15 landfill?

16 A. Are there wastes?

17 Q. Yes.

18 A. Well, at this point, because alternatives
19 have not been determined for the ash, I would say
20 ash would continue going there. It is
21 non-putrescible waste and my understanding is that
22 under the ordinance that it is allowed to continue
23 going there. I would say other inert wastes would
24 be able to continue going there if they're not odor-
25 causing, they're not gas, methane gas or landfill

1 gas causing. So, you know, some of the industrial
2 waste that currently goes there, such as the auto
3 fluff that comes from some of the recyclers, as well
4 as other kind of those incidental wastes that are --
5 I mean, truly are difficult to recycle.

6 There are some technologies that are
7 coming in place even for auto fluff now, but, you
8 know, it's going to be a while before that happens,
9 and so being able to continue to receive those
10 there, that probably makes sense. Those are
11 non-putrescible, and what I mean by that -- they
12 don't rot, they don't break down and decompose and
13 cause the odors that have been a problem at the
14 landfill.

15 So there are wastes that at this point in
16 time cannot be, you know, disposed of or recycled
17 elsewhere. But what I would generally say is that
18 biosolids, there's absolutely no reason with the
19 technologies that are available today, and in fact
20 the technologies that are being developed here, that
21 those should ever go into that landfill after those
22 technologies come on board.

23 I would say that there's no reason why any
24 incidental green waste or other, you know,
25 compostable materials should go into that, into the

1 landfill, including food waste. Those are materials
2 that can be composted and as part of the process
3 that can be composted in the new in-vessel
4 composting project that's being brought on. So
5 that's, I guess, what I'm generally saying. There
6 is absolutely no reason why those things that have
7 traditionally made a municipal solid waste landfill
8 a sanitary landfill, which are those things that
9 decompose, that rot, that cause odors and so forth,
10 there's no reason why those materials have to go
11 into the landfill anymore with the third boiler at
12 H-POWER and the new biosolids operations that are
13 coming.

14 Q. So with the technology in place for the
15 alternatives, you're still saying that there is a
16 need for a landfill for these non-putrescible and
17 other types of waste that cannot otherwise be
18 disposed of? There would still be a need for a
19 landfill, is that correct, for ash and inert waste
20 and auto fluff and all of those other wastes that
21 cannot otherwise be disposed of?

22 A. True. I do not believe that Honolulu can
23 do without a landfill. I mean, that's why you're
24 going through a siting process for a new landfill
25 and it's also why those materials haven't been

1 necessarily excluded from Waimanalo Gulch.

2 Q. Let me interrupt. You're saying a lot of
3 this depends on H-POWER continuing to operate and
4 H-POWER'S expansion.

5 A. Uh-huh.

6 Q. What about when H-POWER shuts down for
7 routine maintenance or during emergency situations;
8 what happens then if there's no alternative
9 landfill?

10 A. The bypass waste, which is what that is,
11 the waste that cannot be processed because of down
12 time and so forth, should be minimal. It should not
13 be a standard. I am not sure exactly the current
14 operating plan for the new boiler coming on line.
15 However, I would generally expect that those
16 materials that are of the greatest concern from a
17 putrescible, from a decomposing standpoint should
18 not have to go out to the landfill. Those should be
19 able to be held.

20 Q. Where would they go?

21 A. Well, they'd be stored, for one thing.

22 Q. There's storage limitations pursuant to a
23 permit. If you were to understand that, then where
24 would they go?

25 A. What I would say is, again, I do not

1 exactly know what the operating plan is for the
2 H-POWER plant when the new boiler comes on. There
3 should be consideration made for additional storage.
4 There should be consideration made that only one
5 boiler at a time has to come off line, so that it's
6 not a total shutdown of the plant. Typically, at a
7 waste-to-energy facility it is not a total shutdown
8 of the plant that's required.

9 Also, looking at the opportunity, if
10 that's -- if it does take that, off -- you know,
11 again, even off-island shipment if -- you know, and
12 having those contracts in place in advance. Very
13 rarely is it the case with a waste-to-energy plant
14 that it is shut down unexpectedly. Typically what
15 it's shut down for is for routine maintenance; a
16 boiler has to be realigned or a new piece of air
17 pollution control has to be added to it. So it's
18 down for a week or whatever. An operations plan
19 should be developed that allows for that to happen.

20 Q. Are you aware that the H-POWER permit has
21 as a condition a back-up disposal option; that the
22 DOH requires, because they recognize situations of
23 emergency where there's going to be shut-down days,
24 they require H-POWER to have a back-up disposal
25 option in the form of a landfill?

1 A. And I am not -- I am not here to say
2 exactly what that back-up should be. A lot of
3 places would have that as the landfill that is
4 receiving the ash, or a cell within that. It would
5 be significantly less than the amount of waste
6 that's going out there today, and that that's -- I
7 think that's something that has to be evaluated in
8 the permitting process.

9 I would also say, again, the items of
10 greatest concern are the food waste, are the -- the
11 green waste, those items that decompose that cause
12 the odors and so forth. Alternatively, you can look
13 at -- ensure that you're bringing on line other
14 systems in your process. This is not a one-legged
15 stool. This is a multi-legged stool. That's why
16 you have composting operations. That's why you have
17 recycling operations. And so it's that multi-legged
18 stool that provides what you need in the community
19 to be able to take those wastes.

20 Q. But you are saying that there are wastes
21 that cannot be otherwise land-filled?

22 A. Today that is true.

23 Q. And today, as well, there are no
24 alternative technologies in place that could take
25 care of, in Hawaii, all the biosolids and the green

1 waste and food waste, because those alternative
2 technologies have not been built yet or haven't come
3 on line yet; is that your understanding?

4 A. That is my understanding today. Today,
5 March 7th, is it -- that yes, that is not the case.
6 But my understanding, and as I noted before, the
7 diligence on the City's part needs to be to ensure
8 that those are in place so that it can handle that.
9 I guess that's what I'm coming back to, is that it's
10 been laid out in the solid waste management plan.
11 It has been laid out in other edicts and you just
12 need to follow through as a community in meeting
13 those.

14 Q. As of July 31st, 2012, will those
15 technologies be in place, as you understand it?

16 A. For handling those?

17 Q. Yes.

18 A. My understanding -- I'm not exactly sure
19 of the timing of the H-POWER third boiler. My
20 understanding is that the additional biosolids
21 handling will not be in place quite by then. But I
22 think it is absolutely necessary to bring those on
23 line as soon as possible, again, to really get out
24 of this situation of wasting this resource, as well
25 as continuing a problem at the landfill with these

1 highly putrescible, you know, sludge, bio-solid
2 waste.

3 Q. So without those technologies in place,
4 you would not recommend shutting down the landfill
5 to MSW if there's no place for those wastes to go;
6 is that accurate?

7 A. What I would say is that there needs to be
8 an option for disposing of those wastes.

9 Q. And if there are no options for disposing
10 of that waste, it would be unreasonable to shut the
11 landfill down to MSW, to those wastes?

12 A. My sense of it -- I am not here to
13 necessarily say what all of your other options are
14 or how you will continue to permit the landfill. I
15 guess what I would say is that if that is the only
16 option that is available to the community, that that
17 is probably the option that's going -- I mean, cost
18 effectively, and, you know, given the time, that for
19 this short period of time that would probably
20 continue to be, you know, the location for those
21 wastes. However, I would not say that that needs to
22 be the -- at all a continued long-term place for
23 those materials to go.

24 One of the other things I really wanted to
25 state here -- and this kind of goes back to this

1 point of, you know, materials having to go to the
2 landfill that are not, you know, current -- that are
3 not recyclable or being able to handle in other
4 ways. I really believe that the community can
5 easily continue to look at those options and
6 evaluate what those options -- what options are
7 available, and that goes for ash recycling, both
8 bottom ash, as well as fly ash. It goes for
9 additional recycling of materials so it doesn't have
10 to go there. It goes to the possible recycling or
11 renewable -- of renewable plastics, for instance, in
12 auto fluff or e-waste and things like that. Those
13 are things that need to continue to happen. Maybe
14 the landfill provides a -- you know, a short-term
15 option for those to be disposed, but it's still
16 looking at, you know, how can these be handled for
17 the long term.

18 MS. VIOLA: Nothing further for now.

19

20 E X A M I N A T I O N

21 BY MR. SANDISON:

22 Q. Good morning.

23 A. Morning.

24 Q. My name is Ian Sandison and I represent
25 Schnitzer.

1 Is it your understanding that the question
2 that is before the Planning Commission in this
3 proceeding is whether or not to delete condition 14
4 of the current special use permit for the landfill,
5 Waimanalo Gulch?

6 A. Yes. That's my understanding.

7 Q. And condition 14 provides that after July
8 31st, 2012, only ash and residue from H-POWER will
9 be accepted at Waimanalo Gulch?

10 A. That is my understanding.

11 Q. Is it your testimony that there will be no
12 other -- that if Waimanalo Gulch is limited to
13 accepting ash and residue from H-POWER, is there a
14 viable alternative for disposal of automobile
15 shredder residue on Oahu?

16 A. I believe there is.

17 Q. What is it?

18 A. My belief is that -- one of things with --
19 and I'll continue to call it auto fluff. It's too
20 long, otherwise -- is that the material -- and in
21 fact, I'm working on another landfill where that
22 material is being used as alternative daily cover.
23 That is an option, as a means of, you know, again,
24 using that material, as opposed to using soil
25 material at the landfill for your daily cover; not

1 your long-term, not your long-term intermediate
2 cover, but your daily cover between cells on a daily
3 basis, and it could be permitted here at Waimanalo
4 Gulch as alternative daily cover. Or, in fact, it
5 is an inert waste; I would suggest that it is a
6 material that in the longer term it would be
7 desirable to recycle it, to have -- because, in
8 fact, there's even some companies that are up and
9 running and studying the use of it for essentially a
10 plastics-to-crude oil recycling. I'm not saying
11 that it's there yet, that that technology is fully
12 there and it can be applied today. However, for the
13 longer term, I think it's something that could be an
14 option.

15 The other thing I guess I would say is
16 that those types of materials that truly are
17 biologically inert, so that they're not going to
18 cause decomposition, they're not going to be an
19 issue for biological odor emissions and so forth,
20 that they could continue to be accepted at a
21 landfill such as this. They don't necessarily fall
22 under this general purpose MSW. I would say that
23 they would be -- they could be a covered waste at
24 the fill, and I've seen that at other sites.

25 Q. Let's go back. As of July 31st, 2012, are

1 you aware of a permissible alternative for the
2 disposal of automobile shredder waste on Oahu other
3 than Waimanalo Gulch Sanitary Landfill?

4 A. I'm not aware, but at the same time, I am
5 not aware of the full universe of options that are
6 available for auto shredder waste.

7 Q. You cannot identify one today that would
8 be a viable alternative other than Waimanalo Gulch?

9 A. I have not evaluated or -- I have not
10 searched for that, no.

11 MR. SANDISON: No further questions.

12 CHAIRWOMAN PINGREE: Thank you. I'm sure
13 there's going to be redirect, so before, we'd like
14 to take a break for lunch and we will resume at
15 12:45.

16 MR. CHIPCHASE: 12:45?

17 CHAIRWOMAN PINGREE: Yes.

18 MR. CHIPCHASE: Yes, Chair.

19 CHAIRWOMAN PINGREE: Thank you.

20 (Lunch recess.)

21 CHAIRWOMAN PINGREE: Back on the record.

22 Mr. Chipchase?

23 MR. CHIPCHASE: Thank you.

24

25

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BY MR. CHIPCHASE:

Q. Mr. Miller, we talked a little bit about your experience both on the mainland and here in Hawaii. I'd just like to focus on a couple of specific aspects of that experience, if I could. With respect to landfill siting, we talked about your work on the siting process on Molokai.

A. Uh-huh.

Q. What other experience do you have with landfill siting?

A. So -- well, for instance, on Molokai it was siting the new landfill there when the older one, which was actually down in the -- right on the beach, in fact, was closed, and so we worked with Maui county to site a new facility there. This was in the early '90s.

Additional landfills which are much larger than Molokai that we worked on in the past really have -- we have taken the process that I kind of laid out here, where we go through this process of looking at the broader alternatives with the broader criteria and then focusing it down with more detailed evaluation on landfills in Kootenai County, Idaho, northern Idaho, which was, in fact, the first

1 fully complying under the new federal regulations at
2 the time, and this was the late '80s, early '90s,
3 for landfills in the U.S.

4 -- sited the landfill in Roosevelt,
5 Washington, which is now owned by Republic. Prior,
6 it was owned by Allied and a smaller firm that we
7 actually worked for at the time when it was sited,
8 and we worked for them in the development of that
9 landfill in the early '90s.

10 And then another project as a good
11 example, which was in an area kind of similar to
12 here. And I don't want to say it's similar to Oahu,
13 because Oahu is an island and so forth. But for
14 Pierce County, Washington, which is the county
15 immediately south of King County, which is where
16 Seattle is at. And this was fully taking multiple
17 parcels and really honing in on this idea of looking
18 at multiple parcels and how we could assemble sites
19 out there, because we weren't finding individual
20 parcels that quite fit the needs, especially with
21 some of the exclusionary requirements they had,
22 which was they really wanted to stay away from
23 wetlands and so forth.

24 So those really kind of drive home -- and
25 then we've done a lot of other siting of jails and

1 transfer stations and things like that, as well. A
2 lot of it -- it's interesting, because people go,
3 Well, what does a jail or transfer station have to
4 do with a landfill? Well, it's the process, the
5 decision-making process that you go through and that
6 you are really driving to the point of developing a
7 decision process that allows your decision makers
8 ultimately to have very clear alternatives that have
9 been evaluated technically and been environmental --
10 been evaluated through the environmental review
11 process. So that's essentially where we're trying
12 to get to in any of these sitings, so that's --

13 Q. So that's the experience with -- some of
14 your experiences, rather, with siting. Do you have
15 any experience with landfill design?

16 A. And then landfill design is even much
17 further. One of the interesting things is -- and I
18 will admit that there is not a lot of landfills that
19 are being sited anymore. It's a dying business, so
20 to speak, because we're using a lot less landfills
21 now or we're using many -- or we're using larger
22 landfills, so there's been a lot of consolidation in
23 that business. But we continue to work with a lot
24 of facilities where we have sited their landfills
25 and we continue to work with them on developing the

1 landfills.

2 So probably over the years I've worked on
3 50 landfill development projects, taking them all
4 the way from either that raw ground and having to
5 develop all the infrastructure around it as well as
6 the landfill or to a -- what's typical now, which is
7 adding additional cells to a landfill. So very
8 similar to what the City has gone through in the
9 past with adding additional cells to Waimanalo Gulch
10 landfill. So each time you do that, you're going
11 through the permitting process, you're going through
12 the design process and then going into construction
13 services, construction management of that work.

14 Q. So when you get to the end of the design
15 process and you open the landfill, that takes us to
16 the operation. Do you have any experience with
17 landfill operations?

18 A. Yeah. And landfill operations, it's --
19 one of the good things in solid waste, as well as
20 most municipal as well as private facility
21 operations is that there are training programs and
22 so operators go through these trainings. Where we
23 come in is helping them on a lot of the specifics of
24 their projects, and so helping them through, okay,
25 this is how you operate this site given, you know,

1 the types of soils you have or how you manage the
2 leachate systems that you have in your landfill and
3 so forth. So we've worked with many clients in that
4 approach.

5 In fact, we've got one client here that we
6 just started working for in the last six months who
7 actually had -- it's a private operation. As an
8 owner, they were not very involved in the process
9 and then came back in to find that their operator
10 was not operating it very well. We stepped in to
11 work with them, to help them write a new operations
12 plan, work through that with a new operator, because
13 they fired their old operator, and to really help
14 them kind of ensure that they really meshed that
15 daily operation of the landfill with all of the
16 infrastructure that you have to maintain and operate
17 as part of that. So those are some of the
18 experiences we have in operations.

19 Most of the time when we've done design,
20 we've also kind of stayed on with that landfill
21 operator to help them with the operation, as well.

22 Q. So have these experiences and others
23 informed your opinions in this case?

24 A. It definitely has. I mean, what I
25 observed, for instance, when we -- in going to the

1 site visit yesterday was based upon, you know, my
2 experience having visited, you know, 100, 150
3 landfills over the years, having worked on many of
4 those, and just understanding what to look at when
5 you go to a landfill, what to -- how is that
6 operator operating, are there some areas where they
7 might be able to improve their operation?

8 Yesterday was actually a very good day to
9 go to the site for a site tour, because it had
10 rained quite a bit beforehand and it was an
11 opportunity to see how they operate in those types
12 of conditions. It looks like they need a little
13 work in operating in wet conditions and, you know,
14 kind of pointed that out, but it's kind of one of
15 those things that, you know, making those
16 observations going out there, it's what I typically
17 do with an operator and a landfill owner to help
18 them through that process.

19 You know, for instance, at the site
20 yesterday at Waimanalo Gulch, it is very wet.
21 Typically, at a landfill where you can expect to
22 have these types of storms this time of year, you'd
23 have areas set up that would allow you to have more
24 -- a smoother operation during wet weather and you
25 call it your wet weather operating area, so that you

1 have a better pad, more solid, your vehicles don't
2 get stuck.

3 When we were out there, we observed two or
4 three vehicles that had to be pulled out of the mud
5 because it was so deep and they had to be pulled out
6 by the landfill operator with their compactor, and
7 also, the tracking of mud and debris on to the
8 on-site roads and into the ditches and observing,
9 you know, one of the operations folks out there
10 having to hand-dig out one of the ditches because it
11 had been filled with sediment.

12 Those are the types of things that you
13 need to work out as part of your operations. And so
14 it was actually good to kind of see under kind of a
15 stressful time how the operation was going out
16 there.

17 Q. On that, I think we've got a couple of
18 pictures here. I'd point you to exhibit --

19 MR. CHIPCHASE: It's been marked, Chair,
20 as K176.

21 BY MR. CHIPCHASE:

22 Q. Do you recognize this photo?

23 A. I do.

24 Q. What are we looking at?

25 A. We're looking at very muddy conditions.

1 I'm not sure if this is one of the vehicles that
2 ultimately got stuck out there.

3 Q. Is this the operating floor where they're
4 dumping the trash?

5 A. This is the operating floor. So
6 essentially what happens out there is -- sorry. You
7 haven't got the photo yet. I'll let you get it
8 there. So at a landfill such as this -- and it's a
9 typical operation -- the vehicle will dump the waste
10 there on a flat area and then the compactor will
11 come in, which is the large, knobby-wheeled vehicle
12 that pushes the waste, will push it into the active
13 area. Now, typically, this might -- you might see
14 this person backed up closer to where the waste is
15 going, but under the circumstances, because it was
16 so wet, they couldn't. So that's one of the
17 activities that you do to be able to operate in
18 these circumstances so that, you know, you don't get
19 into the deeper mud.

20 One of the other things I actually
21 observed in this is a lot of the material that will
22 be able to go to the third boiler at H-POWER, as
23 well as -- it's kind of hard to see in this picture,
24 but a piece of e-waste that was actually in this
25 load, which is one of the reasons why I was kind of

1 interested in it; e-waste being electronic waste,
2 which really should not be going into the landfill.
3 Those are materials that should be separated out and
4 handled separately. I mean, that is the national
5 standard, is non-land-filling of e-waste. So it
6 was something that we observed out there. I'm not
7 saying that that doesn't happen, you know,
8 incidentally. But it is something that should
9 definitely be discouraged, and especially observing
10 that close actually not allowing it.

11 Q. You mentioned the clogged ditch. I'll
12 hand you what we've marked as Exhibit K173.

13 THE WITNESS: Does everyone have it? Not
14 quite.

15 BY MR. CHIPCHASE:

16 Q. What are we looking at in K173?

17 A. So actually what we're looking at in
18 Exhibit K173 is one of the surface water ditches.
19 It's actually immediately up slope from where we
20 observed the poor gentleman having to hand-dig the
21 ditch out. In fact, you see the -- kind of a pile
22 of some of the sediments that he's already dug out
23 there at the lower middle of the picture there. But
24 it's kind of representative of dirty roads leading
25 to sediments into the ditches and then drainage into

1 an area that was pretty -- it appeared that then
2 overflowed and caused more sediment and dirt to flow
3 onto the road.

4 Again, you know, I wanted to just show
5 this from the standpoint of kind of what you see --
6 what we were seeing at the site as far as, you know,
7 probably some need for additional sedimentation
8 controls, ditches that don't have to be cleaned out
9 such as this. I mean, those are kind of those
10 straightforward things that you do at a site to
11 minimize -- for two things -- minimize your
12 operational needs, you know, people out there hand-
13 digging out ditches -- he was probably going to be
14 there all day, you know, because of the amount of
15 material that was in there -- but also from the
16 standpoint that filled ditches can lead to
17 overflows, can lead to damage of roads, can damage
18 other ditches, can cause other problems at the site,
19 so you're needing to actually have probably more
20 controls on that. So it's things like this that,
21 you know, that I observed out there.

22 Q. On that topic of consequences of maybe not
23 having an adequate surface water or water management
24 system, I'd like to show you Exhibit K178.

25 Mr. Miller, what are we looking at here in

1 K178?

2 A. So here what we're looking at is runoff
3 off of one of the operations roads at the site that
4 then is going over a slope and causing, as you can
5 see, pretty heavy erosion around part of the gap --
6 this is, in fact, part of the gas, as well as
7 surface water collection system. These are areas
8 that will have to be repaired just immediately here,
9 but, you know, if in fact it -- you know, if it
10 damaged one of these, it could cause other problems
11 at the site. I didn't observe that, but it's still
12 kind of one of these issues of needing to have
13 better surface water controls internal to the site,
14 as well as, you know, to ensure that you don't have
15 discharge from the site.

16 Q. How long was the site visit yesterday?

17 A. We were on site for about -- I think about
18 two hours, from about 9:00 until 11 in the morning.

19 Q. Looking at a couple of your other
20 observations during the site visit -- and I'll start
21 with Exhibit K179. Mr. Miller, what are we looking
22 at here in K179?

23 A. So this was what appeared to me to be an
24 intermediary sedimentation pond at the landfill
25 that's not -- it's near where the bypass is, but

1 it's not specifically part of the bypass, and so
2 what caught my eye on this picture was the berm
3 that's on kind of the upper left there is a, you
4 know, well-built berm. What I observed immediately
5 about it is that there was no spillway on it. In
6 any type of situation where you have a drainage and
7 water coming into something that is only -- the only
8 outlet is a culvert, as shown here, a culvert that
9 could be clogged, could clog somehow, or even if it
10 just slowed down, the water could back up behind
11 this, could easily over-top the berm here, and
12 without an emergency spillway, what will end up
13 happening is because of the material that was used
14 in this -- in this berm here, which was -- it's kind
15 of a well-mixed gravel, but it could easily just be
16 eroded away, you know, if the water was to over-top
17 it, at which point you've lost your pond, you've
18 lost your pipe, possibly you've damaged other things
19 down below.

20 What was interesting is taking this
21 picture and then to the right there was a piece of
22 plastic in there which is actually part of a plastic
23 material that goes into the drainage ditches, so
24 it's an engineered drainage ditch section
25 essentially. It was just a piece of it that was

1 down there, which I looked at that and I looked at
2 this culvert and I thought, Well, this could easily
3 be the piece that clogs that culvert, you know, if
4 the water came in there, at which point you have an
5 over-topping and you have damage.

6 These are the small, incidental things
7 that you see at a site that really need to be picked
8 up and need to be taken care of, and I guess my
9 thought is that these are those -- these are
10 observations I made at the site. I'm looking for
11 them. I mean, that's kind of what I do. So it's
12 also things that the operator should be looking for,
13 you know, what would happen in this circumstance.
14 It could be catastrophic to lose this and then
15 possibly damage other infrastructure downstream of
16 it.

17 Q. I believe in K175, Mr. Miller, we have a
18 picture of what you're talking about with that piece
19 of liner.

20 A. Yes.

21 Q. Mr. Miller, K175, is that the -- is that a
22 picture of the liner lying in the detention basin
23 you're talking about?

24 A. Yes, it is. It looks relatively small out
25 there, just because it's in the background, but it's

1 fairly large. I could see where it could readily
2 cover the culvert and cause an over-topping,
3 possibly, of the berm. And really, irregardless of
4 that, that's why I look at a berm like that and say,
5 Well, it really does need to have the protection of
6 an emergency spillway. You know, that may sound --
7 well, he's just an engineer seeing these things.
8 But those are the types of things that you need to
9 make sure that you take care of at a site like this,
10 so that when you do have major storm events and, you
11 know, a piece of liner does fall into the pond, it's
12 not going to be a problem, you know, that could
13 cause catastrophic damage to the berm and then on to
14 other infrastructure.

15 Q. I'd like to look at one more of your
16 observations on this two-hour site visit, K174.

17 MR. CHIPCHASE: And Chair, while Chris is
18 handing those out, this should end -- I think it
19 ends my series of photographs, so I would move to
20 admit K173, 174, 175, 176, 178 and 179.

21 CHAIRWOMAN PINGREE: That's fine. Thank
22 you.

23 MS. VIOLA: No objection.

24 CHAIRWOMAN PINGREE: I'm sorry.

25 MS. VIOLA: That's okay.

1 MR. SANDISON: No objection.

2 BY MR. CHIPCHASE:

3 Q. Mr. Miller, what are we looking at here in
4 K174?

5 A. What we're looking at here -- this is kind
6 of on the perimeter of the landfill, some litter
7 that's out on the perimeter. While it doesn't look
8 like a lot of litter there, we did see other, but
9 what I observed is that -- and what my general
10 statement to operators is, and owners, is
11 essentially to have a zero litter tolerance policy
12 at your landfill. There's a couple of reasons for
13 that. One is, obviously, just, you know, what will
14 happen next to this. Well, it will probably blow
15 off site and go elsewhere and it's a nuisance and
16 it's a problem and it's an eyesore and so forth.
17 But also from the standpoint that if you don't keep
18 up with it, it is a longer-term problem, as well as
19 it just gives your facility, you know, kind of a bad
20 reputation as being a poorly-run operation. So it's
21 one of those things I'm always telling folks, you
22 know, Keep it clean. You know, yes, it's a
23 landfill, but it needs to be operated as cleanly as
24 possible. The waste needs to go into the cell.

25 And, you know, I know in the past many of

1 the complaints at this site have been off-site
2 litter generation, and particularly down into the
3 areas down below, in the communities down below.

4 Q. So what, then, did you take away from your
5 site visit in terms of the operation of the
6 landfill?

7 A. You know, my general observations were
8 that it's -- they're things I've seen before.
9 They're things that I have commented to operators
10 and owners to before, you know, ensuring that you
11 have a wet weather operation area, ensuring that
12 you're not tracking a lot of mud onto your internal
13 roads, which eventually goes off site, possibly;
14 ensuring that you have your surface water systems in
15 place and that are not going to potentially have
16 major issues from a storm event, such as clogging of
17 the culvert, you've got a back-up such as a high
18 flow -- or a spillway, emergency spillway.

19 So it's really, you know, looking at this
20 site and the operator needing to make those
21 observations themselves, or their consultant making
22 those observations for them, or however that might
23 be to be able to say, You know, these are some
24 things you need to do to make sure that you have a
25 better operating landfill. Honestly, it's not just

1 for environmental protection, but it's also for
2 protection of your investment that you have at a
3 site like this, as well as to reduce your operating
4 costs. So it's kind of a full range of reasons why
5 you do this. And particularly for my clients that
6 I'm advising, it is the environmental protection,
7 but it's also how can they operate the most
8 efficient -- efficiently as possible.

9 Q. In terms of operations, you and Ms. Viola
10 talked some about regulatory compliance and meeting
11 the regulations and the standards imposed by the
12 state. Are those regulations the ceiling that
13 operators shoot for?

14 A. No. I mean, typically, they are the
15 minimum. I mean, in fact, in some cases they call
16 them the minimum standards. And you meet those
17 minimum standards and you meet maybe the letter of
18 the law. Most operators I've seen -- and actually,
19 most states that I've worked with -- and I'll admit,
20 they're primarily west coast states, as well as
21 Hawaii, but Hawaii being somewhat different from the
22 others. Most states actually have a little bit more
23 rigorous requirements for many of these different
24 things, such as the liner systems, the type of
25 monitoring, those types of things. So what they say

1 is those are minimums that we're looking at. And
2 typically, you would look at opportunities not to go
3 out of your way to have additional cost and so
4 forth, but definitely from a risk management
5 standpoint on your site to ensure that you aren't
6 going to have major issues of off-site discharge or
7 damage to your infrastructure on site or damage to
8 your operating area that could cause, you know, a
9 difficulty in operating during wet weather. It's
10 those types of things that typically I see operators
11 being a little bit more diligent on, and in specific
12 areas, possibly, you know, going beyond.

13 A good example of that really is the
14 bypass channel, bypass system. As I noted before,
15 typically I would have recommended that be in line
16 and on line prior to the cell being constructed or
17 completed at least and definitely before it was
18 filled. It's just good practice. It's a good way
19 to reduce your risk at the site. So that's
20 typically what I would see in a site like that.

21 And yeah, maybe Department of Health would
22 allow something less than that because it's allowed
23 by the rules and regulations, but, you know, rules
24 and regulations don't cover everything, and they
25 don't necessarily cover all of your potential risk,

1 both to your facility as well as off site. That's
2 where the diligence of the engineer and the operator
3 come in, to ensure that you have that.

4 Q. Is it the State's fault, then? The
5 January and December spills, are they the State's
6 fault?

7 A. Well, I don't see them as the State's
8 fault, because it's really the requirement of the
9 owner/operator to build -- to design and build a
10 facility that's going to be able to contain the
11 waste and be able to bypass the surface water, be
12 able to contain surface water in-site, you know, if
13 it's contaminated, and then be able to treat it.
14 Those are the requirements of the owner/operator.
15 It's not the State's requirement to do that.

16 The State is, in fact, a regulatory body.
17 They're ensuring kind of the checklist -- okay,
18 they've followed these rules -- but not necessarily
19 from the standpoint of the engineering intent of it.
20 And that's why I noted earlier on that myself, as an
21 engineer, I will make sure that I look at those
22 risks that are out there and that I don't put myself
23 at risk as a professional, but also, I don't put my
24 client at risk in how some of these things are both
25 constructed, as well as sequenced in that

1 construction.

2 Q. Well, let's talk about construction
3 sequencing from a broader perspective, more from the
4 industry standard. What is the industry standard
5 for construction of these bypass systems and these
6 diversion systems?

7 A. What I would say, I mean, is that
8 typically -- so I will be pretty broad-brushed in
9 that, because every site is different, and what that
10 means by a bypass might be different on one site
11 than another.

12 Q. Well, let's be more specific then.
13 We're dealing with a canyon.

14 A. Yeah. So a canyon fill such as this,
15 where we are controlling water that's coming in from
16 a point source -- I mean, it's from the canyon, a
17 fairly narrow canyon, fairly easy -- I'll put it
18 this way, an easy area to collect that water from, I
19 mean, and get it into a bypass. I would have that
20 in place. I mean, that is so fundamental, and the
21 industry standard, typically, is to have that in
22 place, have that bypass in place prior to putting
23 this -- what is a multi-million dollar investment in
24 the ground and then starting to operate that,
25 because you want to protect your investment. You

1 want to protect the investment, as well as what that
2 investment is protecting, which is groundwater,
3 surface water, public health and safety that's down
4 slope of it. So I guess that would be the standard
5 that I would say out there.

6 That's why I note that it's a little
7 different on every site, because you're looking at
8 somewhat different circumstances, but the point is
9 what you're doing is protecting health and safety,
10 primarily public health and safety and the
11 environment, and part of that also is your own
12 economic interest of protecting your investment that
13 you have in the ground.

14 In this case, with those storm events,
15 there was damage to the investment, you know, damage
16 to the liner, damage to waste, needing to clean up
17 after that, but then also there was the damage to
18 the environment and public health and safety.

19 Q. And in fact, you're aware the EPA cited
20 Waste Management --

21 A. Correct.

22 Q. -- and the City for damage to the
23 environment?

24 A. For that very reason, yes.

25 Q. So if you had been advising the operator

1 and the City, would you have said that it was
2 reasonable to go forward with filling the cell
3 before the diversion system had been completed?

4 A. No, I would not.

5 Q. In your review of the records -- and let
6 me take a step back. You talked about you've
7 reviewed documents in this case.

8 A. Uh-huh.

9 Q. Give me a sense of the volume of documents
10 that you and your team have looked at.

11 A. Yeah. I kind of have to visualize this,
12 because we looked at most of them on line or
13 electronically, but, you know, probably in a
14 bookshelf, it probably would have been about this
15 wide of documents that we reviewed, so we reviewed
16 essentially the operating record of the landfill,
17 the design report leading up to it, the engineering
18 report, the plans and specifications, the monitoring
19 record of the landfill, the solid waste management
20 plan, all of the attachments to that, as well as
21 other studies that were done for biosolids and other
22 special waste handling in the community. So it's
23 kind of a myriad of different areas, but it was a
24 lot of materials that we reviewed in that, which is
25 really what's necessary.

1 Because as I noted before, this is a --
2 when you're looking at solid waste and you're the
3 owner, essentially, of the solid waste system in a
4 community, it is all the way from that comprehensive
5 holistic plan all the way down to those facilities
6 that you're operating and the operations for those
7 facilities, as well as the design for those
8 facilities, and then ultimately all of the
9 environmental protections and environmental
10 monitoring and all that. So it's a pretty big
11 record that comes into play when you do that.

12 Q. In this collection, this bookshelf of
13 documents, we talked about the EPA order. Was that
14 the only violation or warning letter that you
15 reviewed?

16 A. Well, no. I mean, the past violation
17 letters that they received from the State, as well
18 as from EPA -- you know, I guess what it -- it laid
19 out to me that it was -- it was a pretty long record
20 of violations or questionable operating practices
21 and release -- you know, environmental releases and
22 so forth.

23 I think one of the ones that was probably
24 most -- somewhat most egregious to me was then
25 ultimately the falsification of the monitoring

1 records that was done at the site. That came to
2 light after we had done our study, but I looked at
3 the process on that, as well, and those are some
4 real concerns. This is a public facility with --
5 you know, the public is counting on the City to
6 protect the public health and safety and the
7 environment, and that really calls it into question
8 when, you know, one of the operations people was not
9 doing -- actually, to the point of illegally doing
10 those activities.

11 Q. So on that topic of gas monitoring, with
12 Ms. Viola you looked at your report in, I think,
13 Exhibit K146, and we looked at page nine, and we
14 looked at your conclusion on gas well monitoring,
15 and I think you just said that that statement was
16 made before it came to light --

17 A. Yes.

18 Q. -- that gas head readings had been
19 fabricated for some period of time. Right?

20 A. It was.

21 Q. What's the purpose of taking these gas
22 head readings?

23 A. Well, the gas head readings, they're
24 really taken to determine the overall system
25 operational efficiency, as well as determine if

1 there's other concerns at the site. So by being
2 able to detect different constituents in those gas
3 readings, you can determine if there's oxygen
4 intrusion into the landfill or if you might have a
5 landfill fire, so you might have carbon monoxide
6 being generated in those or -- and these are for on-
7 site wells. For off-site wells, obviously you don't
8 want to have any hits of anything off-site or
9 outside of the landfill itself. So those are really
10 important readings to ensure that your environmental
11 protections are in place and that you don't have
12 issues of particularly a landfill fire or oxygen
13 intrusion into the landfill which then could cause a
14 landfill fire, or actually show that you're emitting
15 methane or other constituents outside of the
16 landfill.

17 Q. If we look at the history -- and I know
18 you've read the testimony -- if we looked at the
19 history of violations at the site and sort of ending
20 with this failure to monitor, really an employee's
21 willful failure to monitor, is this kind of
22 operational practice common for the landfills that
23 you've worked on operationally?

24 A. No. I would say not at all. I mean, I
25 have not worked on a site that has had anywhere near

1 violations of this size. And I'm not saying that,
2 you know, all operators are squeaky clean, you know,
3 and everything is perfect, but to the extent that
4 these violations were, especially the earlier
5 violation, which I believe was a, I think, \$2.5
6 million fine or judgment, or however that was, that
7 was really high and I had never seen anything that
8 high before, and particularly from the standpoint
9 that there was a lot of violations.

10 And yes, I understand that, you know, the
11 City and its operator took care of those issues, but
12 it shouldn't come to that point, to have that long a
13 list. I mean, typically what you're seeing is maybe
14 one violation, and essentially you work it out in
15 that site visit because, you know, well, you weren't
16 handling your daily cover quite right and this -- we
17 want you to do it this way. Those are the types of
18 things I typically see, and they can actually make
19 the change right there. These were substantive
20 violations that, you know, it did take them effort
21 to rectify.

22 Q. This morning you were also talking about
23 alternatives, and -- alternatives to landfill, and
24 you looked at some alternatives you developed, some
25 examples in King County. We've also talked in this

1 proceeding about San Francisco and San Francisco's
2 recycling efforts. Are you familiar with those?

3 A. Somewhat, yes.

4 Q. Do you know what level of diversion San
5 Francisco is able to reach?

6 A. I think at this point San Francisco is in
7 the upper 70 percent or something like that landfill
8 diversion of their material and actually one of best
9 numbers in the country. One of the -- they actually
10 do go to landfill, but it's out -- I believe it's
11 outside the city or county of San Francisco is where
12 their waste ultimately goes.

13 One of the other things that's interesting
14 about San Francisco, because I've actually done some
15 other work down that way, is they have a very high
16 tipping fee, as well; I think in excess of \$140 a
17 ton. So they have done that specifically in many
18 ways to drive -- you know, provide funding for their
19 solid waste programs, but also to push as an
20 economic incentive not to generate waste. You know,
21 all of a sudden it makes sense to compost, to do
22 your recycling, to pull out your food waste, and so
23 you see residents doing that, you see commercial
24 entities doing that. I'm not seeing that around
25 here nearly to that extent.

1 Q. Does San Francisco have a waste-to-energy
2 facility?

3 A. No, they don't. They actually do landfill
4 there, outside the county.

5 Q. How are they able to achieve an 80 percent
6 diversion rate without a waste-to-energy facility?

7 A. By essentially recycling and reducing
8 their waste stream.

9 And they have been a very aggressive
10 applier of what's called zero waste, essentially,
11 this idea -- and it truly is concept at this point
12 -- the idea that there will be absolutely no waste
13 at all. But, you know, by putting that out there as
14 the goal, you get a lot closer to achieving it than
15 if you say, We're gonna knock it down to 50 percent,
16 or something like that. So they've really put out
17 an aggressive goal and they've put incentives out
18 there to really achieve that goal.

19 Q. What would San Francisco be able to
20 achieve if they had waste-to-energy on the same
21 scale as we do here in Honolulu?

22 A. Well, first off, they wouldn't need to
23 have it at this scale, because they're not
24 generating that much waste anymore, I mean, after
25 it's gone through all these other diversions. But

1 at the same time, they would probably be able to
2 achieve that up into the, in fact, upper 90s.

3 The goal in some European countries,
4 Germany and Denmark included, which do include
5 waste-to-energy in theirs, is to achieve in the
6 upper 90 percent landfill diversion; in fact,
7 ultimately, zero land-filling of their waste.
8 That's kind of hard to do, all the way to zero,
9 because there's some stuff that it's just really
10 hard to do anything with. But they're actually
11 looking at 98 percent.

12 Q. So with waste-to-energy on the scale that
13 we have in Honolulu -- and correct me if I'm wrong,
14 but I think with the third boiler on line the
15 capacity is 900,000 tons; is that right?

16 A. Uh-huh. Yeah, in that neighborhood.

17 Q. What would we need to do to be able to
18 achieve that upper 90 percentage of waste diversion?
19 Where are we falling short?

20 A. Big things, for sure, are what we've
21 already talked about, which is definitely the
22 biosolids, sludges, and beneficially using those
23 materials, along with green waste composting and
24 kind of a broader food waste composting, as well.
25 So bring all of those organics that can be composted

1 together, which are huge --

2 In fact, food waste is probably the number
3 one area people are attacking now to really bump up
4 their recycling rates, because there's so much food
5 waste that's generated, both at kind of the
6 commercial level, restaurants, groceries and so
7 forth, but also even at the residential level, in
8 allowing food waste to actually go into your compost
9 bins and or green waste bins now in many
10 communities. So that's a big piece of it.

11 The other thing actually is to make a much
12 more aggressive -- as I noted before, aggressive
13 approach to recycling the ash. So essentially what
14 you're seeing in Europe is that they are achieving
15 very high uses for the ash. And so what they're
16 using it for is, as I kind of noted before, is the
17 fly ash as a cement additive to concrete -- along
18 with cement as an additive to concrete -- in fact,
19 has some very good positive attributes for concrete,
20 making it stronger and actually faster curing. And
21 secondly, using the bottom ash as a -- screened
22 bottom ash as a structural fill. It actually is
23 very stable. It compacts extremely well and can be
24 used in engineered fill for like foundations and
25 things like that.

1 In fact, I know one thing I've observed is
2 in Hamburg, Germany, they've used for their -- all
3 of their new wharf systems out there, they've used
4 essentially bottom ash from the Hamburg incinerator
5 for that entire engineered fill below that wharf
6 structure there. So it's a very good use of that
7 material. If you're not using that, you're using
8 virgin soil materials. So this way you're able to
9 use this as the resource to that, instead of using
10 natural materials.

11 Q. Let's focus on a couple of other ways that
12 you mentioned, biosolids and food wastes. Compared
13 to the industry standard, how far behind in
14 recycling biosolids is Honolulu?

15 A. I would say that it's pretty far behind.
16 As I noted before, there's a high level of recycling
17 of and reuse of biosolids happening -- in fact, in
18 the state of Washington, and I believe Oregon and
19 California, as well, there is a landfill ban for
20 biosolids, sludges to landfills. Essentially, they
21 have to be beneficially used. This has been the
22 case for quite a long time.

23 In fact, the largest producer of biosolids
24 in the state of Washington, which is King County,
25 which operates the entire sewer system -- or almost

1 all the sewer system for the city of Seattle and all
2 the suburbs -- all of that has been recycled and
3 reused for the last 25 years in agriculture
4 applications.

5 The other area -- and this is with food
6 waste -- is that it's actually a very compatible
7 means of using food waste, green waste, and
8 biosolids together in a co-composting, which my
9 understanding is is the newer operation that the
10 City is bringing on through a private contractor is
11 a -- is that type of in-vessel composting of those
12 types of materials -- or actually, a digestion of
13 those type of materials.

14 Q. But even though the City is behind in
15 biosolids and in food waste and other diversions,
16 you testified that the City would still be able to
17 achieve -- or to be free of a general purpose --
18 wouldn't need a general purpose municipal landfill
19 by 2013.

20 A. Yeah.

21 Q. How is that so?

22 A. Well, again, while the City has been slow
23 to get to this point of beneficially using its
24 biosolids, it is now starting to do that, and I
25 think what's important is to stay on that track, is

1 to in fact ensure that those systems are installed;
2 that, you know, if Sand Island needs to be expanded,
3 expand it -- that system there or some other system
4 with that; that the in-vessel digestion system does
5 in fact go through; that in fact markets are
6 developed for this material to go to. That's what's
7 going to make that happen, at least from a biosolids
8 standpoint. From food waste, as well, that should
9 be material that can be composted much more
10 aggressively than it is today. And that's what
11 we're seeing in many communities now, much higher
12 level of food waste and green waste composting.

13 Q. Along those lines, you talked about the
14 need still for some landfill, either to take the ash
15 until we can beneficially reuse it or inert
16 material, such as the auto fluff or auto shredder
17 waste.

18 A. Yeah.

19 Q. -- or to use as daily cover in a landfill.

20 A. Uh-huh.

21 Q. So as part of that, you looked at the site
22 selection committee, the current site selection
23 committee's efforts to find a new landfill. I want
24 to make sure I understood your testimony earlier.

25 Were you criticizing the committee's work

1 or the process?

2 A. I was not criticizing the committee's work
3 at all. I think -- in fact, after looking more at
4 what the committee has done, I've been impressed by
5 their fortitude in sticking -- you know, in being
6 there and being part of that and, you know, possibly
7 being frustrated with kind of -- with how slow it's
8 gone and kind of this whole need to now kind of
9 backtrack on the system.

10 Typically what I've seen and what I noted
11 in my earlier testimony is that the -- you know, the
12 committee has a really strong role and it needs to
13 be -- you need to accentuate their role on this,
14 which is really to bring the public sentiment to
15 this process, to make sure that it's a public
16 process, make sure that the public's concerns and
17 needs really are brought into it and that, you know,
18 their considerations are brought into the ranking of
19 sites, into the weighting of criteria, into what
20 those criteria should be. That, I think, is what
21 the committee has done and, you know, what they've
22 -- and I think they have done their work pretty
23 well.

24 What I think -- what I see more is that
25 again, back to this point that the City kind of lost

1 a real opportunity of having, you know, a solid
2 basis to start from with the solid waste management
3 plan; not that it was perfect, you know, and the
4 siting process and all that that was laid out there,
5 but the fact that that was a starting point that
6 was, you know, laid out in, you know, and put out
7 there in 2009, so a full -- nearly three years ago,
8 and that that was really the starting point that
9 needed to be taken. But then it didn't appear that
10 that really came in and fully informed the siting
11 process now, you know, which would have helped the
12 committee and the committee members to have a better
13 feel for what they were really being asked of and
14 needed to do in participating.

15 Q. One of the parts of that process, then,
16 that you and Ms. Viola had talked about was the
17 restrictive screens and the need to go back and re-
18 look at sites.

19 Can you expand upon that, maybe explain
20 how the use of -- I think you called them
21 restrictive screens affected the site selection
22 process?

23 A. So essentially -- and I'll go back to my
24 little figure here. It doesn't look like much, but
25 we'll go back to it. Essentially how I would

1 observe it is that while I kind of laid out this,
2 you know, this funnel where we're going from a wide
3 number of sites -- it actually had, you know -- let
4 me step one back. Looking at it from the standpoint
5 of how the whole process goes, establishing the
6 committee, giving the committee kind of their --
7 what you want the committee to participate in, which
8 is truly providing that community insight into the
9 process. That happens up here. That happens in
10 determining the criteria, how are the criteria going
11 to be applied, what criteria will be exclusionary,
12 which will not be exclusionary, and exclusionary
13 from the standpoint that they'll actually, you know,
14 remove sites from the process. That needs to happen
15 up here. And then being able to take these down and
16 as you narrow it down to fewer sites or fewer areas
17 that you're looking at, that you're able to apply
18 these in a more aggressive mode and get into more
19 detail on that. This is kind of how you lay out the
20 criteria.

21 So what's happened now is that all of a
22 sudden down here, without really having gone through
23 a rigorous process here, determining, wow, there
24 aren't enough sites to really -- you know, there
25 might -- it would appear that there would be more

1 sites. I'm just kind of speaking that
2 hypothetically in some ways, but just that the
3 questioning that there are only two sites that came
4 out of this whole process and then opening it up and
5 saying, Well, maybe we should be looking at, you
6 know, properties that are down to 90 acres, maybe we
7 should be looking at sub-prime agricultural lands,
8 maybe we should be looking at other things such as
9 that. And then what that's doing is then kind of
10 throwing the whole process back up to here, and so
11 you've -- because what that is doing is it's kind of
12 bubbling it back up here. Maybe this is a better
13 representation of that, because all of a sudden
14 you're having to put another funnel into the
15 process.

16 What I'm saying and what I really was
17 conveying in my earlier testimony is that -- and
18 it's really not that difficult to do -- is to ensure
19 that you have the process established right here
20 now, where you're at today, that is going to be able
21 to get you to these reasonable sites down below
22 here, and that, you know, the criteria have been
23 established, that the criteria have the proper
24 ranking within the criteria and how they're going to
25 be applied between sites and that, you know, you

1 have the right criteria and that they're weighted
2 properly for what the true desires are of the
3 community, as well as, you know, what's most
4 important to the community. That's where the
5 criteria come in. That's where the weighting of the
6 criteria comes in, is in that whole area what is of
7 concern to the public.

8 And this is where you're at today, and I
9 think it's really important that you take this as an
10 opportunity to re-up and make sure that you have the
11 rigorous process that's going to get you down here
12 to environmentally, socially and economically sound
13 sites that can pass the muster of the environmental
14 review process.

15 Q. In taking a look at that process, you
16 mentioned the 2008 solid waste management plan and
17 the failure to follow really in some respects -- in
18 many respects those guidelines; right?

19 A. Yes.

20 Q. Do you know which consultant assisted with
21 the preparation of the 2008 solid waste management
22 plan?

23 A. There was R.W. Beck, which actually is now
24 SAIC. They were bought by SAIC.

25 Q. Do they have experience in site selection?

1 A. They do and they're a -- and especially
2 with SAIC, they're a national firm, but even before
3 that they were pretty much a national firm, highly
4 regarded solid waste engineering firm, especially on
5 the west coast and through the midwest, as well as
6 out here.

7 Q. Is the same consultant now helping the
8 site selection committee with its process?

9 A. Not my understanding. I believe R.M.
10 Towill is doing the work today and it doesn't appear
11 that they've taken any -- as I noted before, have
12 taken anything from that 2008 -- I shouldn't say
13 taken anything, but it doesn't appear that they've
14 really used that as the starting point.

15 And as I noted before, it's not like they
16 have to take everything that's in that, but it does
17 make sense that this is a public process, it
18 established the solid waste plan, it established
19 this process and these criteria. At least use that
20 as a starting point.

21 Q. Do you have any idea why a change was made
22 from R.W. Beck to R.M. Towill?

23 A. I don't, and I would be just guessing
24 whatever that would be. My only thought on it is
25 that I guess I would have expected the marching

1 orders to the new consultant, because I know this is
2 what I would have expected, you know, if I was doing
3 the siting effort now; is that, Okay, we've been
4 through this. We have -- we've gone through and
5 we've established pretty much what we want as our
6 siting process and at least the start of the
7 criteria in the solid waste management plan, please
8 take that as you move forward. That would have been
9 my marching orders to that new consultant if I had
10 been the City.

11 Q. In earlier testimony you noted some
12 differences between the solid waste management plan
13 and the current site selection process in terms of
14 criteria and how they approached it.

15 I don't mean to go through really any of
16 those. I'd just like you to turn to Exhibit K147,
17 beginning on page four. Pages four through seven,
18 and really on to eight, appear to me to be, in part,
19 comparisons between the solid waste management plan
20 in 2008 and the current site selection process. Is
21 that right?

22 A. Uh-huh. It is.

23 Q. So it's in this and other parts of this
24 report that you note those differences, those
25 specific differences --

1 A. Yes. Specific differences.

2 Q. -- and your --

3 A. I do. Yes. Yes.

4 Q. In addition to the unduly restrictive
5 screens that you've been over and the failure to
6 follow the guidelines, the guide established by the
7 solid waste management plan, you also talked about
8 methodological errors in the ranking and application
9 of criteria.

10 A. Uh-huh. Yes.

11 Q. Again, I don't mean to rehash that. I
12 just would like to have you turn to page one of your
13 report, the same report, K147, which of course is
14 your Site Selection Evaluation Technical Memorandum;
15 right?

16 A. Uh-huh.

17 Q. Here you talk about the problems with
18 deciles --

19 A. Yeah.

20 Q. -- and why you can't use deciles. If we
21 turn through the other pages of your report, you
22 identify the problems with weighting, implicit
23 weighting and these other errors that you
24 identified; right?

25 A. Yes.

1 Q. Mr. Miller, do you understand that the
2 latest direction from the Land Use Commission to
3 develop a new site was issued in October 2009?

4 A. That's my understanding, yes.

5 Q. It's now March 2012.

6 A. Uh-huh.

7 Q. Is there any reason it should take this
8 long to complete a site selection process?

9 A. No, not at all. I mean -- well, what I
10 would say is particularly from the standpoint that
11 there was a very good starting point for the site
12 selection process, there was the solid waste
13 management plan, and as I noted before, it laid out
14 essentially the process as well as a really good
15 start on the criteria which to follow. So I would
16 even say it -- you know, you had two and a half
17 years from a really solid starting point. So from
18 that standpoint, I would say this has been far too
19 long to have gone through that process to where it
20 is today, which is essentially back almost to the
21 beginning, because of the need to kind of reopen the
22 process with the new criteria.

23 Q. In your view, based on your review of the
24 documents and the testimony that you have looked at,
25 has the City's site selection process been

1 reasonably diligent?

2 A. No. What I would say is that beginning in
3 -- well, in 2009, when it had a good starting point
4 to begin from, that was the time in which it was not
5 being diligent and since then it really hasn't been.
6 I mean, from the standpoint of being able to start
7 at a very good starting point, when there's still
8 kind of that collective memory of having gone
9 through it in the solid waste management plan
10 itself, that was the time that -- the spark that was
11 there to then start the process and engage the
12 committee and engage others in this process of doing
13 the siting, and that was a very big missed
14 opportunity to begin it there in October, November
15 of 2009.

16 Then once it actually did get going, which
17 I believe wasn't until January of last year, it has
18 been in fits and starts that it's come to this point
19 of, you know, I -- of a year out -- over a year out
20 and really not having got too far off the dime from
21 where it started from.

22 Q. Mr. Miller, you've been retained as an
23 expert witness and a consultant in this case; right?

24 A. Correct.

25 Q. In fact, I retained you.

1 A. You did.

2 Q. Is your compensation for your work in this
3 case in any way dependent upon your testimony or the
4 conclusions you reach?

5 A. No.

6 MR. CHIPCHASE: Chair, I think that's all
7 I have. If you'd indulge me, I'd take five minutes
8 to look at my notes, and if I have nothing else,
9 I'll pass the witness.

10 CHAIRWOMAN PINGREE: That's fine. In
11 fact, this might be a good time to give our court
12 reporter a break.

13 MR. CHIPCHASE: That would be perfect.

14 CHAIRWOMAN PINGREE: Why don't we resume
15 in five minutes.

16 (Break taken.)

17 CHAIRWOMAN PINGREE: We're back on the
18 record. Thank you.

19 MR. CHIPCHASE: Chair, I am ready to pass
20 the witness. Before I do that, I would move to
21 admit two documents that were referred to both in
22 Mr. Miller's cross and then again on redirect. One
23 is Exhibit K170, which is the latest group memory
24 minutes from the site selection committee. The
25 second is K171, which is the site plan prepared by

1 Mr. Miller's office showing the deviation from -- in
2 the construction of cells from the original plan to
3 what was actually built in that cell that flooded in
4 January 2011.

5 CHAIRWOMAN PINGREE: Any objection?

6 MS. VIOLA: I haven't seen it.

7 MR. CHIPCHASE: We're passing them out
8 right now.

9 MS. VIOLA: I'm sorry. What are you
10 representing that K171 represents?

11 MR. CHIPCHASE: Perhaps Mr. Miller can
12 explain it better than I can.

13 MS. VIOLA: I have no objection to K170,
14 the minutes, but I don't think that what Mr.
15 Chipchase described as the contents of K171
16 basically jibe with what he has presented, so --

17 CHAIRWOMAN PINGREE: Mr. Miller, would you
18 describe 171 for us, please?

19 THE WITNESS: I will as soon as everybody
20 has their copy of it.

21 So what this exhibit is -- we note it as
22 our figure one -- was our understanding based upon
23 the original engineering report from '09 and the
24 subsequent design of cell E6, what that looked like
25 out at the site and then the -- so how that differed

1 between the two, and then the damaged areas, and
2 these are all from the damage reports and the
3 further reports there. So what I wanted to do is to
4 be able to kind of get a picture of this.

5 Being an engineer, I'm kind of a visual
6 guy, so I needed to have an actual figure that kind
7 of showed this to me. So that's why I had this laid
8 out, and so I thought it would be a good piece for
9 you, and particularly from the standpoint that cell
10 E6 was significantly smaller than it had originally
11 been planned to be made, so it actually ended up
12 being in such a way, especially with that storm
13 event, that that is why -- you know, from my
14 observations of it, why it would have been damaged
15 under those circumstances. So that's kind of why I
16 wanted to put this in place and that's what the
17 notes essentially lead to, as well. The notes are
18 down there on the lower left side.

19 CHAIRWOMAN PINGREE: So, Mr. Miller, what
20 you're saying is what's in the red boundary are the
21 actual --

22 THE WITNESS: Yes. So what it is is the
23 red boundary is what was actually constructed. The
24 area that's identified as E6 was what was in the
25 engineering report. And then the green hatching

1 there is the damaged areas.

2 MR. CHIPCHASE: With that explanation,
3 Chair, I re-offer it.

4 MS. VIOLA: No objection.

5 MR. SANDISON: No objection.

6

7 E X A M I N A T I O N

8 BY MS. VIOLA:

9 Q. Mr. Miller, you cited in what's been
10 marked as Exhibit -- with the photographs that have
11 been entered into evidence, without having to go
12 through these --

13 A. Which one was it that you're --

14 Q. These are all the ones you just testified
15 regarding.

16 A. Just all of them. Okay.

17 Q. All the pictures of the landfill that you
18 took yesterday.

19 A. Uh-huh.

20 Q. You cited a number of different concerns
21 in these various pictures.

22 A. Yeah.

23 Q. And you're saying that they're not up to
24 standard. Could you tell me what standard you're
25 talking about and if this is an established

1 standard; for example, if it's an engineering
2 association standard, a sanitary waste association
3 standard or if it's a federal, state, what standard
4 are you referring to?

5 A. When I say that, I'm talking about an
6 engineering standard of care that I take as an
7 engineer with 25 years experience in the field.
8 That's why regulations typically require that
9 designers have a certain amount of experience in a
10 specific area. While I am a civil environmental
11 engineer, I do not design other civil environmental
12 engineering pieces. I do solid waste landfills, as
13 well as some other areas. But I stay in my area and
14 in which there is a standard of care as myself as a
15 professional in that area to follow.

16 When I look at a site like this and I
17 point these out, it is not necessarily to a
18 prescriptive rule or regulation out there. Because
19 honestly, the rules and regulations are not
20 necessarily going to be so site-specific that they
21 can apply. What I'm looking at is an operations
22 plan should provide for the proper operation of a
23 site during wet weather conditions. I observed this
24 site and I -- it looks like -- well, it doesn't look
25 like that's fully there. I mean, you know, a wet

1 operating pad does not appear to be in place, the
2 equipment was getting stuck out there, some of the
3 haul vehicles were getting stuck out there, they
4 were having to be pulled out by the operator. And
5 those things happen and maybe that is part of their
6 operations plan is that that's how they're going to
7 remediate that, is by pulling out these pieces of
8 equipment. But, you know, I look at it and I say,
9 Well, there's other ways to do it, there are
10 operating methods in a -- in wet weather that will
11 be able to remedy those, for the most part. That's
12 what I'm looking at when I say it doesn't
13 necessarily meet the standard.

14 Q. So it doesn't necessarily meet your
15 standard?

16 A. The standard of the profession of which I
17 am a member of. Correct.

18 Q. But there are no established standards
19 that essentially you could point to and we can cite?

20 A. I will put it this way, and the wet
21 weather operation is a good example of it: There is
22 a requirement -- and this goes back to if not in
23 state rule -- and I can't necessarily cite state
24 rules on this -- but within the operating practices
25 for solid waste --- and as -- you know, as part of

1 the guidance and training put out by the Solid Waste
2 Association of North America, often known as SWANA,
3 lays out how you operate in wet weather conditions,
4 and that's kind of -- that is a national
5 clearinghouse for operational practices.

6 Q. That national practice or that SWANA
7 operating practices would dictate everything that
8 you stated in your testimony?

9 A. No. I didn't say that. Let me finish.
10 What they're saying is that you need to have a plan.
11 You need to show how you're going to operate during
12 wet weather. It's not going to be prescriptive on
13 how exactly it's going to happen, because they don't
14 know your site. They don't know the type of cover
15 soils you have or the type of running surfaces you
16 have. So it really is up to the professional to
17 look at those, to weigh those and determine what is
18 the way that you would operate this site, for
19 instance, during wet weather conditions.

20 Q. So you're saying that Waste Management
21 doesn't have a wet weather condition policy or plan?

22 A. I have not seen one, but then I did not
23 look for it. Since this just came up yesterday
24 during our observations out there, I did not
25 research that.

1 Q. So they could have one. They could be
2 complying with SWANA. You just don't know?

3 A. They may be complying with their own.
4 However, given the conditions out there, I don't
5 know. It didn't seem like it was working all that
6 well for them.

7 Q. So your experience or what you're
8 testifying to is you would design or operate to a
9 pretty ideal situation, then, ideal circumstances
10 that would require -- let me put it this way:

11 With your involvement for projects that
12 you design and operate, you would recommend pretty
13 ideal situations or circumstances?

14 A. So -- I guess I'm not exactly sure where
15 you're going with that question. Because, for
16 instance, here, this is -- yesterday was not an
17 ideal circumstance at that site.

18 Q. Right. So you're saying that if these
19 were all corrected, all of these observations you
20 did, that would be the ideal situation and they
21 would be functioning properly in your eyes?

22 A. What I am saying is that you have plans in
23 place and you execute those plans to allow for
24 better operating during inclement conditions, and
25 that is through, you know, operator knowledge of the

1 site -- to the extent that you can have it as part
2 of an operations plan, great; otherwise, a lot of it
3 is operator knowledge of the specific conditions
4 they have at that time.

5 Q. So for example, under your shop, under
6 your watch, there wouldn't be this one piece of
7 plastic in Exhibit K174? There wouldn't be a piece
8 of plastic on the hill?

9 A. You know, in my -- if it was in many
10 operations -- and I'm not saying all operations --
11 folks would look at that and say, Hey, you need to
12 pick that up out there. In fact, I have seen many
13 times when the actual landfill manager, the top dog
14 at the site, is out there and he stops his pickup
15 out there and he or she walks out there and picks up
16 that trash himself, because they have a zero
17 tolerance for that. I have seen that. And I'm not
18 saying that every site is going to operate that way.
19 But honestly, the sites that operate that way, it
20 permeates through the entire operation that you're
21 going to keep and operate a clean and efficient
22 operation.

23 Q. So in your projects that you were involved
24 with, then, you would ensure this type of higher
25 level operation?

1 A. If I was a landfill operator, that is how
2 I would operate.

3 Q. Or if you were the individual assisting in
4 designing the landfill, wouldn't that be true as
5 well?

6 A. There is myself as the designer and as the
7 operations consultant, but then there is also that
8 operator and how they operate the site. And I'm not
9 to say -- I'm not going to be, you know, their
10 keeper and ensure they follow all those aspects.
11 Because a lot of these things -- and it may not even
12 be written down other than something on the wall in
13 their operations room saying, Zero tolerance for
14 litter, and everybody knows it and they'll go out
15 and do that, as an example.

16 Q. Mr. Miller, weren't there situations that
17 you were involved with that the design or the
18 operations were less than perfect, as well?

19 A. Design or operations were?

20 Q. Uh-huh.

21 A. Well, yes. I mean -- and in fact, in
22 those circumstances, actions were taken to improve
23 the situation, either to ensure that, you know, that
24 litter was picked up or ensure that new litter
25 fences were installed, if it was a litter issue, or,

1 in fact, if it was a design issue where surface
2 water was causing problems with the interior roads
3 -- this happens quite a bit, because roads move
4 around at landfills all the time, so it's really
5 just -- it's less a design issue than kind of a list
6 of expectations of landfill operators that this is
7 how you're going to build a road. Honestly, from
8 one time to the next, internal to the landfill, it
9 may not be quite working out, so you make
10 observations and then they go in and fix them. I
11 mean, that happens all the time.

12 Q. But you hold yourself to a high standard
13 for design as an engineer; is that correct?

14 A. I do.

15 Q. But weren't you involved in a project in
16 Puget Sound where there was a -- you were designing
17 a commercial transfer station, a trash transfer
18 station and the doors were too small to allow for
19 the truck to go through?

20 A. That was not in the Puget Sound area.

21 Q. Okay.

22 A. That was Kootenai County, Idaho and the
23 trucks were not going through it. The trucks were
24 backing up. So what it was is trucks backing up to
25 a door and then disposing in through that door. And

1 it was a design that, you know, in retrospect didn't
2 work out, and so we widened the door. I mean, you
3 know, it's those things that happen.

4 In fact, what it was -- it was
5 interesting, because what was the occurrence there
6 was that the operator wanted to have -- this is
7 totally different from Hawaii. Let me tell you.
8 This is in an area that typically -- probably right
9 now there's snow on the ground and it's probably
10 25-mile-an-hour winds blowing and it's probably
11 blowing through the doors. They wanted to be able
12 to have more controls on how they operate through
13 these areas. So they wanted to be able to actually
14 have separate doors into it. So it was a request
15 from the owner to do that. And, you know, in
16 retrospect, yeah, they decided, well, you know, it
17 probably wasn't a very good idea. And it was early
18 enough in the transfer station design days -- I
19 mean, this was over 20 years ago that this actually
20 happened. So that they determined that it was
21 better just to have a larger door, and then
22 actually, when they expanded that, just to put
23 everything inside. Everybody drives through big
24 doors and then everything is inside.

25 So, you know, those things happen and it's

1 to work with the operator, with the owner to resolve
2 those. But thanks for reminding me of that. I
3 hadn't thought of that one for a long time.

4 Q. This is just an example of maybe the ideal
5 or the engineering standards not necessarily coming
6 into play in the situation?

7 A. Could you repeat that?

8 Q. This is an example of, say, the standard,
9 the engineering standard, the high standard that you
10 would hold, say, the landfill to, and one plastic
11 bag would not necessarily come into play in your
12 ideal --

13 A. Well, you know, one thing -- and I do not
14 want to, you know, put too hard a hammer down on the
15 operator out there at the site. I mean, these are
16 observations I make. If the operator had been
17 walking around with us yesterday, these are
18 observations I would have made to them and I would
19 have said, you know, you may want to look at this,
20 you may want to look at this; wow, you know, where
21 this berm is here, I would put a high flow spillway
22 on that because that kind of concerns me seeing that
23 there.

24 So it's not -- I don't want to be coming
25 across kind of as preaching on this. What it is is,

1 you know, having 25 years experience doing this,
2 these are observations that I make. These are
3 observations I would hope that this operator, as
4 well as their consultant and others that are
5 advising them, can also make to them.

6 Q. So it's your testimony -- would it be
7 correct to say that a qualified landfill engineer
8 could design and operate a landfill even with these
9 observations that you made?

10 A. Could design with these? Yes. Well, yes.
11 Most of these are truly operational. The only one
12 that is not operational is that berm without an
13 emergency spillway. That is a design flaw.

14 Q. Right. But that is a design flaw that
15 essentially would prevent operating this landfill,
16 or could you still operate the landfill with --

17 A. You could operate the landfill with that.
18 What I'm saying is that it's something that likely
19 should be remedied out there.

20 Q. But would you --

21 A. The other -- excuse me.

22 Q. In other words, it would be better, in
23 your opinion, to have a spillway?

24 A. Yes.

25 Q. But they can do without a spillway and

1 still basically be able to run the landfill?

2 A. Well, they're operating it. Yes.

3 The other things are more operational,
4 it's not necessarily items that will be written
5 down, although, you know, tolerance levels for
6 litter, those -- like I say, sometimes they're just
7 written on the wall, sometimes they're written into
8 operations plans.

9 Probably the more telling are the issues
10 of the dirt on the roads, the sediment in the
11 ditches and, you know, making sure that practices
12 are in place to prevent that. That's probably the
13 -- more of an operations issue that probably, I
14 would guess, needs to be hammered out a little bit
15 more in the operations plan. But then I haven't
16 looked at the operations plan, so --

17 Q. You haven't looked at the operations plan?

18 A. Not specific to those activities, yeah.

19 Q. And would it be accurate to say that these
20 types of observations are not necessarily uncommon
21 at landfills at any point in time?

22 A. I would say that they are -- they're
23 somewhat uncommon, especially the activities out on
24 the working face with -- with the number of vehicles
25 that were getting stuck out there and having to be

1 pulled out. That seemed to me to be somewhat
2 unusual, I, mean, from my experience in looking at
3 even muddier sites than this, you know, where
4 there's mud in some areas but not in the actual area
5 where you had your operators operating.

6 Q. Everything else may be, in your opinion,
7 something that may be happening in other landfills?

8 A. They may.

9 Q. You also talk about -- Mr. Chipchase and
10 you talked about minimum standards in terms of
11 regulatory requirements.

12 A. Uh-huh.

13 Q. For this particular landfill, what would
14 you characterize the diversion channel? Is that the
15 minimum standard?

16 A. The diversion channel -- and I don't
17 remember exactly the design criteria used for that,
18 but I would say that it was minimum standard from
19 the standpoint it was bypassing the flows that were
20 required to be bypassed around the landfill.

21 Q. What is your understanding of the minimal
22 -- I guess the minimal storm that a landfill has to
23 manage pursuant to?

24 A. It needs to control run-on, water running
25 onto the site from the 25-year 24-hour storm.

1 Q. So the western diversion channel, was that
2 limited to a 25-year 24-hour storm -- to manage a
3 25-year 24-hour storm?

4 A. I do not recall exactly what that was.

5 Q. So you don't know what that was designed
6 to address?

7 A. I think I knew it at one point, but I
8 don't recall at this point.

9 Q. But your testimony is that it's a minimum
10 requirement for diversion channels?

11 A. What I said is that diversion of the run-
12 off around is the minimum standard for the 24-hour
13 -- 24-hour 25-year storm. So I'm not exactly sure
14 what that standard was used for that.

15 Q. So you're not saying that this particular
16 diversion channel was minimum standard?

17 A. I'm not saying that, no.

18 Q. Because you don't know what it was
19 designed to address?

20 A. I don't recall what it was.

21 Q. And also, you mentioned in the site visit
22 yesterday that the drainage material that they were
23 using was above standard. Do you recall making that
24 statement -- that comment?

25 A. That it was what?

1 Q. The draining -- the corrugated drainage
2 system that they were using was -- kind of the piece
3 of plastic --

4 A. Oh. You mean the ditch liner?

5 Q. Yeah, the ditch liner.

6 A. Yes. Uh-huh.

7 Q. Would you consider that to be above
8 standard? Because you had mentioned that at other
9 facilities you used pieces of --

10 A. Oh. Actually, yes. So I pointed out this
11 corrugated -- it's kind of a corrugated ditch liner
12 that was put in out there. It's actually a very
13 good material for that. And what I noted out there
14 at the site was in the old days people would just go
15 out there -- and you probably have seen this -- and
16 actually cut corrugated pipe in half and do the --
17 try to do the same thing. What ended up happening
18 is it would warp and you'd have all kinds of
19 problems with it, and I was observing that this is
20 much better than that. That was sub-standard. But
21 this was a good product. I mean, and it was a good
22 application of that product, from what I observed.

23 Q. Okay. Thank you. You also mentioned in
24 speaking with Mr. Chipchase that you felt that the
25 landfill had to be able to address the storm that

1 occurred in January -- the storms that occurred in
2 December 2010 and January 2011.

3 A. Uh-huh.

4 Q. Were you aware that the storm, especially
5 in January, was of the magnitude of a 100-year
6 storm?

7 A. I wasn't sure of the exact magnitude of it
8 or how it was classified. I don't think I've ever
9 seen that specific --

10 Q. But you characterize it in your report as
11 a catastrophic storm; is that correct?

12 A. Catastrophic results from the storm, I
13 believe is how I termed it, but I'm not exactly sure
14 how that wording is exactly.

15 Q. Let's refer to your declaration -- your
16 report. It's in your conclusion section.

17 A. Conclusion, yeah.

18 Q. So it's page nine. I think you say, The
19 December 2010 and January 2011 storm events were
20 catastrophic beyond the 25-year 24-hour storm the
21 landfill was engineered to withstand.

22 A. Yes. Correct.

23 Q. Are you saying that you would expect the
24 landfill to essentially be designed and operated to
25 meet any potentiality, including a catastrophic

1 storm?

2 A. No, I do not.

3 What I would say here in this is that --
4 and this really goes back to my statement this
5 morning, as well -- is that this system wasn't even
6 operational. The bypass wasn't even operational,
7 from my understanding, at the time of those storm
8 events, at least as fully -- as designed, because
9 the construction hadn't been complete. So we don't
10 know if that would have been able to convey a storm
11 event, from my understanding. So what happened is
12 that it was internal and it was -- so we had the
13 storm event. It caused issues in the landfill that
14 may not have happened if that high flow bypass --
15 everything that we saw constructed yesterday had
16 been in place at that time.

17 Q. But you also don't know, in making that
18 statement --

19 A. I do not know that. That's true.

20 Q. -- that if that system that was in place,
21 that the same thing wouldn't have happened, because,
22 as you called it, it was a catastrophic storm.

23 A. What I do know and what I could make as an
24 observation out there at the site is that if that
25 had been in place and it had been functioning fully,

1 is that the amount of water that would have been in
2 the site would have been less. So I would
3 conjecture, true, to say that the damage would have
4 been less, because there would have been less storm
5 water into the cell, because it would -- at least
6 some of it would have been conveyed by that.

7 Q. But you can't say with any assurance that
8 there would have been no damage or that it would
9 have been completely avoided by the installation of
10 the diversion channel?

11 A. I cannot say that, that's true.

12 Q. So you're not testifying that the landfill
13 has to be managed or -- designed to address all
14 potentialities?

15 A. No, I'm not saying that.

16 Q. Because -- why would you say that?

17 A. I said, no, I'm not saying that.

18 Q. Yes. Why would you not say that?

19 A. What I'm saying, again, is that -- and
20 what I've noted a couple of times is that those
21 facilities that are designed and constructed to
22 protect the integrity of the landfill, to reduce or
23 eliminate the run-on of surface water onto the site,
24 those need to be in place and operational, in my
25 mind, prior to -- I would say prior to construction

1 of the landfill -- but in some cases, you know,
2 that's a risk taken by the operator/owner -- but
3 definitely prior to filling.

4 Q. Do you --

5 A. Because all the -- sorry. All the
6 protections were not in place.

7 Q. Do you know why they -- Waste Management
8 of Hawaii and the DOH, in allowing them to do the
9 simultaneous construction, do you know why they made
10 that choice?

11 A. Specifically, I do not.

12 Q. Could you envision any situation where
13 that choice would be justified?

14 A. The only time I would see that it would be
15 justified is if in fact the conveyance was not
16 necessary to truly protect the physical integrity of
17 that infrastructure that was in place, but even more
18 specifically the waste mass that was being placed
19 there.

20 Q. What if there was nowhere else to put
21 waste?

22 A. Well, I guess what that would tell me,
23 again -- and this actually is quite telling, if that
24 was the case, because that's why you build --

25 Q. Before you respond, the question is: If

1 there was no place else to put the waste, would that
2 justify simultaneous construction of the cell and
3 the diversion channel, because that's the only --

4 Just answer that question.

5 A. I --

6 Q. In a vacuum. That's the question.

7 A. If, in fact, that was the absolute only
8 place for that waste to go, it may. Although, I
9 would expedite construction of my high flow -- my
10 bypass, as well as other factors to ensure those are
11 in place prior to -- particularly prior to filling.

12 Q. As far as your observations yesterday, did
13 you feel that the landfill was operating -- but for
14 the, I guess, the criticisms that you note, that the
15 landfill was operating properly?

16 A. My -- sorry?

17 Q. -- as far as you could see?

18 A. As far as I could see, generally speaking,
19 you know -- in what I observed here, yes, it was a
20 bad day for them. I mean, it was wet, it was, you
21 know, a hard day -- operators day, and I know how
22 those go because I've been on sites where that's
23 been the case.

24 That being the case, as I noted before,
25 these are observations I make as a professional in

1 this field and I would pass on to an operator
2 operating in these circumstances. That said, I
3 would say that it's probably average to a little
4 slightly below average, the operations.

5 The one thing I would say, though, is that
6 the working -- the working face, the working cell
7 was kept very tight. I mean, it was a good
8 operation from that standpoint, which is very
9 important. I mean, that is how you control odors.
10 That is truly how you ultimately control litter and
11 so forth. So I do have to hand it to the operators
12 for maintaining a pretty tight operating area there.

13 And, you know, again, you know, very wet
14 day, you know, that they were operating in. But it
15 seems like that's probably one area that they should
16 have worked out, is their wet weather operations a
17 little bit better, so --

18 Q. Mr. Miller, where do you understand that
19 currently the green waste is going?

20 A. In -- in the city?

21 Q. In the city, where is it being disposed?

22 A. My understanding is that it's going to
23 multiple private composting operations at this
24 point, and is composted for either, you know, for
25 use in the soil nutrients, soil amendment market.

1 Q. So your understanding is that none of it
2 is going to the landfill?

3 A. Actually, I should take that back.
4 Incidentally, there's some -- there's obviously some
5 going to the landfill. We saw some yesterday. I
6 mean, it's incidental. There is a green waste ban
7 in Hawaii. You know, it's not supposed to be going
8 there. That's awfully difficult to control in some
9 ways, because people bring it in in loads. And so,
10 you know, incidentally I would say that it probably
11 is going into the landfill. In fact, I observed
12 some yesterday.

13 Q. So when you're criticizing the recycling
14 of green waste, what more would you want the City to
15 do if they're already sending it to multiple
16 composting operations?

17 A. What I would say is that -- and generally
18 what I look for in this is highest and best use.
19 And this is what the State's solid waste plan looks
20 at and this what the City's solid waste plan looks
21 at, the highest and best use of materials. And
22 that's why you have a hierarchy of disposal. It's
23 waste reduction and reuse. It's recycling and
24 composting. Then it's incineration. Then it's land
25 filling. Essentially, you want to do as much of the

1 recycling and composting prior to incineration.

2 I have not observed at H-POWER how much
3 compostables are going in there. Because honestly,
4 that is part of the way that you ensure you have
5 capacity at H-POWER for all of the non-compostable
6 waste that does need to be burned, is to ensure that
7 all that material that can be composted is pulled
8 out and is composted as its highest and best use,
9 and then those other materials are going into the
10 incinerator.

11 Q. But the green waste is currently being
12 composted.

13 A. No. I realize that it is. I don't
14 believe that the City is -- and all the private
15 vendors are reaching as much of it as they could,
16 and that also goes into the commercial side, as
17 well.

18 Q. Even though green waste is prohibited from
19 going to the landfill?

20 A. Yeah. Because the thing is, you have to
21 have other means and very readily accessible means
22 for composting for it to happen.

23 Q. So your testimony is that green waste
24 should be composted -- even though it's being
25 composted now, they should do a better job at

1 composting?

2 A. I would say green waste, and particularly
3 food waste, does have a ways to go to reach a much
4 higher level.

5 Q. Where is food waste going now?

6 A. My understanding is that food waste, a
7 good share of it continues to go to the incinerator.

8 Q. Does any food waste go to the landfill?

9 A. I do not know. It would be in those
10 bypass loads, I would guess. You know, I have not
11 done an evaluation of that, and I'm not sure if the
12 City has either.

13 Q. So you are criticizing the incineration of
14 green waste even though it doesn't go to the
15 landfill?

16 A. On the hierarchy of use of these as
17 resources, the waste-to-energy plant is after
18 composting.

19 Q. But food waste, as far as you know, is not
20 going to the landfill?

21 A. I did not observe any. I don't know.

22 Q. And then you also state that no e-waste
23 can go into the landfill. Is that your
24 understanding pursuant to federal law?

25 A. The federal law, in my understanding, at

1 this point is to maximize the -- or to minimize the
2 disposal of e-waste at landfills.

3 Q. Yes.

4 A. So the proper handling of those materials
5 outside of the landfill.

6 Q. But my question is: Does federal law
7 prohibit disposal of e-waste in a landfill?

8 A. At this point it does not. I believe
9 there is a longer term goal to restrict --
10 specifically restrict e-waste. I cannot cite that
11 specifically.

12 Q. You're saying the federal law doesn't
13 prohibit certain disposal of e-waste in a landfill;
14 right?

15 A. I do not recall.

16 Q. So when you testified that you were
17 concerned with that load because there was e-waste
18 in that load which shouldn't be going into the
19 landfill, you're not sure about that, then?

20 A. When I look at that, that is, again, a
21 best practice. It goes back to the point that what
22 you're trying to do is minimize the hazards and the
23 toxic substances that are going into the landfill.

24 Q. So that's a best practice and not
25 necessarily something that's prohibited by law?

1 A. I do not know specifically. There are
2 ongoing restrictions for e-waste, but it's different
3 by different states and I do not recall exactly what
4 it is here in Hawaii.

5 Q. Okay. So when you made that statement
6 that you saw that e-waste in the truck and it
7 shouldn't be there, that's not based on any kind of
8 legal prohibition?

9 A. My understanding, though -- and I cannot
10 cite this specifically -- is that the City is trying
11 to eliminate e-waste from the landfills. But it's
12 not -- you're right. It's not an outright
13 prohibition, from my understanding.

14 Q. From a legal standpoint?

15 A. Yes.

16 Q. You also said that the committee, the site
17 selection committee, they were limited to two sites.
18 Could you expand on that? What do you mean by they
19 came up with only two sites and therefore had to go
20 back and reconsider?

21 A. My understanding from the meeting memory
22 of -- I think it was the February 1st meeting, was
23 that the application of the site selection at that
24 point by the consultants had brought it down to two
25 sites.

1 Q. What two sites, do you recall?

2 A. I do not recall.

3 Q. So that was the impetus to look at
4 additional sites?

5 A. That was my understanding, correct.

6 Q. So that would be the basis for your
7 criticism of the process, that it would be limited
8 to these two sites?

9 A. What my criticism is is that it was a
10 process that was so exclusionary that then the City
11 did find the need to expand the criteria, which
12 quite honestly is legitimate. But it's not within a
13 process that's all that rigorous to trying to find
14 the best sites to both exclude those sites that are
15 not responsible as well as find those sites that
16 are. So I guess that's my criticism, is that. It's
17 not specifically two sites or that there's those two
18 sites, but that the process did not -- was
19 definitely imperfect.

20 Q. Well, it was exclusionary because it would
21 limit them to two sites; is that an accurate
22 statement?

23 A. It would limit them to those two sites as
24 they applied, and it appeared to be far too
25 exclusionary.

1 MS. VIOLA: No further questions.

2 CHAIRWOMAN PINGREE: Mr. Sandison?

3 MR. SANDISON: A couple of follow-up
4 questions.

5

6 E X A M I N A T I O N

7 BY MR. SANDISON:

8 Q. When you were talking with Mr. Chipchase
9 about automobile shredder residue being used as
10 alternative daily cover --

11 A. Uh-huh.

12 Q. -- would you tell me a little bit about
13 how that process works on the mainland, from your
14 experience with that?

15 A. So typically -- and again, very
16 specifically to daily cover use, so this is the
17 cover that is only for that, you know, 12-hour
18 period between closing and opening up the next day.
19 Any intermediary cover has to be a full mineral
20 material to provide a fire break between cells and
21 so forth. And the sites where I have worked where
22 it has been used, it has been allowed essentially
23 as-is, because what we're trying to do with
24 alternative daily cover, as with any cover, for the
25 most part, is to control vectors, so to control

1 mosquitos, rats, birds, that type of stuff. So from
2 the standpoint of being a barrier for that purpose,
3 it generally has been accepted as-is coming out of
4 the recyclers.

5 Q. Is there a benefit to the landfill for
6 using it that way?

7 A. Definitely. The benefit to the landfill
8 is that you're able to not have to use your soil
9 materials. In many cases, you have a lack of good
10 soil material for daily cover and so you don't want
11 to use it for daily cover every day.

12 The other thing is, the advantage at the
13 site is that in fact they may still apply a tipping
14 fee to it, usually reduced, but still apply a
15 tipping fee, so you're getting paid to use this
16 material as an alternative daily cover for your
17 site. So there's an economic advantage to an
18 operator to be able to use it that way, as well.

19 MR. SANDISON: Thank you.

20 CHAIRWOMAN PINGREE: Commissioners?

21 MR. CHIPCHASE: I just have my brief re-
22 direct before we end.

23 CHAIRWOMAN PINGREE: I don't think so.

24 MR. CHIPCHASE: Really? That's how we've
25 done it with the prior witnesses that were subject

1 to cross-examination.

2 CHAIRWOMAN PINGREE: How long do you need?

3 MR. CHIPCHASE: Five to ten minutes.

4 CHAIRWOMAN PINGREE: Five minutes.

5

6 E X A M I N A T I O N

7 BY MR. CHIPCHASE:

8 Q. Mr. Miller, can food waste be composted?

9 A. Definitely.

10 Q. Are you aware that there's a state law
11 prohibiting businesses and government offices from
12 disposing of e-waste in the landfill?

13 A. I did believe there was a commercial. I
14 hadn't heard of a residential.

15 Q. Are you aware that some municipalities
16 have zero tolerance for e-waste in landfills?

17 A. Definitely.

18 Q. Is there any reason Hawaii shouldn't
19 follow the best practices?

20 A. You know, it's my sense that they should.
21 In fact, there are many applications that are now
22 looking at recycling -- truly recycling of e-waste
23 from the standpoint of recovery of, you know, the
24 extensive metals that are in there, as well as
25 actually recovery of the plastics that are in there

1 and glass. In fact, it's somewhat like the auto
2 shredder waste; the plastics that are in there and
3 being able to recover those with some of these newer
4 systems that are in place -- or being looked at
5 being in place.

6 Q. When we did the site inspection, you took
7 a look at the -- where the bypass channel ends,
8 where it dumps out in the basin.

9 A. Yes.

10 Q. Give me an idea of how big that pipe was.

11 A. So it's a very large pipe. I believe it's
12 either -- it's probably about a -- either an
13 eight-foot or a ten-foot diameter pipe that's
14 discharging to the basin down there.

15 Q. So whatever volume of water can fit
16 through that eight- to ten-foot pipe, if the
17 diversion channel had been in place, could have been
18 diverted from the cells at the back of the valley?

19 A. That's my understanding. Because it's
20 picking up the bypass -- truly the bypass of the
21 upper canyon to bring it around the site.

22 Q. Ms. Viola had you start off on a
23 hypothetical that if in fact there was no other
24 place to put the waste in the whole landfill except
25 for that cell, would it be reasonable to construct

1 the diversion channel and the cell at the same time.
2 Do you remember that discussion?

3 A. Yes.

4 Q. What failures or what errors do you see
5 would have led to a situation where there's no other
6 place to put the landfill except a cell that does
7 not have a diversion system in place?

8 A. Well -- and one thing I was going to add
9 at that time was I see that as an incidence of poor
10 planning. I mean, essentially, the reason why you
11 have five- to ten-year capital planning at a
12 landfill is so that you know how your waste is
13 coming in, you know the volumes that are coming in,
14 when you need to bring on new parts of your
15 landfill; so when do I need to build a new cell.
16 Typically, you want to bring a new cell in and all
17 the infrastructure that supports it three to six
18 months ahead of needing it, so that you're not
19 necessarily forced into needing it the day that it
20 comes on line, and also so that you're able to work
21 it around different seasonal events and so forth.
22 That's probably more the case in some of the areas I
23 work on the mainland where you don't want to go into
24 a cell when it's snowing. But even here, you know,
25 you don't necessarily want to go into a new cell

1 when you have very wet conditions, for instance. So
2 those are circumstances that good capital planning
3 prevents that from happening.

4 Q. Just a final line, Mr. Miller -- we looked
5 at the pictures from the site visit, K175, K173,
6 K174, K176, and you talked about how K173, for
7 example, shows sediments in the ditch that needed to
8 be cleaned out --

9 A. Uh-huh.

10 Q. -- and the liner left in the basin on
11 K175.

12 A. Yeah.

13 Q. -- the litter on K174, the failure to have
14 a wet weather operating pad on K176.

15 Is having a wet weather operating pad a
16 radical idea for landfills? Is that unusual?

17 A. No, it's not. It's pretty typical,
18 because the last thing you as an operator want,
19 especially during inclement weather when you've got
20 other operational things that you're having to worry
21 about, like your daily cover being wet and having to
22 -- you know, extra effort in getting it placed and
23 so forth -- the last thing you want to be doing is
24 doing a lot of extra work getting your haulers
25 unstuck or, you know, providing, you know, work

1 specific on that day to helping them, you know, have
2 better access.

3 So typically what you do is you have an
4 area that is set aside, and maybe you're changing it
5 every couple of weeks, but set aside where you're
6 going to operate if you have inclement conditions
7 and where your vehicles aren't going to get stuck
8 and the like.

9 Q. And the same idea, just very briefly, Mr.
10 Miller -- is zero tolerance for litter a radical
11 idea for landfills?

12 A. Not really. And I mean, it's not to say
13 that, you know, that you're not going to see some
14 piece of litter out there at some time. But again,
15 it kind of comes back to this whole idea that, you
16 know, a clean site is respective of a lot of other
17 things, as well; that you're going to keep the roads
18 clean, you're going to keep the litter picked up,
19 you're going to be a better neighbor, you know, all
20 those types of things that kind of come into play
21 and typically you see together with that zero waste
22 tolerance.

23 Q. So the same with your other observations;
24 are they radical ideas, utopian landfill practices?

25 A. No. No. It's pretty much, you know, as I

1 see it, pretty typical operating practices.

2 MR. CHIPCHASE: Nothing further, Chair.

3 CHAIRWOMAN PINGREE: What I'd like to do
4 is open up to questions from the commissioners.

5

6 EX A M I N A T I O N

7 BY MS. DAWSON:

8 Q. Where do we start? We really appreciate
9 it. In spite of the efforts to pick apart your
10 statements, I think you managed very well to explain
11 them and clarify them.

12 I understand that your testimony is that
13 not enough of the alternatives in the best case
14 scenario were explored. Is that your testimony?

15 A. Yes. For alternative waste disposal
16 options.

17 Q. Waste disposal. And that even if those
18 alternatives had been explored by the City, there
19 apparently was not very much -- did you say that
20 there was no preparation for the commission on the
21 selection committee? Did they have no prep to their
22 deliberations on site selection?

23 A. I do not know that specifically. My
24 understanding -- I mean, just in looking at what I
25 was looking at, again it's that it seemed that it

1 started from, you know, ground zero and essentially
2 without really applying what had already been done
3 in the solid waste plan, and it seemed like that was
4 a -- you know, really a missed opportunity, and that
5 that would also have given the committee and the
6 committee members, advisory committee members a
7 starting point themselves, you know, to be able to
8 say, Okay, this is where we're starting from. And
9 not that it was inclusive of everything that needed
10 to be considered, but at least it was a starting
11 point, and then what's missing, what did they want
12 to emphasize or however that might be. It seems
13 like that was a missed opportunity, not using that
14 as a tool to engage the committee.

15 Q. For several years now we have been asking
16 the City and the site selection committee to give us
17 an idea what they are doing and what their findings
18 have been. I've learned more from you than I have
19 in any of the testimony that has come previously
20 from the City, and there has been no report from
21 this site selection committee. We've asked and
22 asked for it and have gotten very vague answers, but
23 no clear ones.

24 If I understand your testimony today, they
25 still don't have any answer. They don't have any

1 specific answers on site selection.

2 A. On actual sites?

3 Q. Yes.

4 A. It does not appear so. That's where it
5 came down that there were only two sites identified
6 through the application of the process here in the
7 last couple of months, and that's really where
8 currently the advisory committee said, We don't
9 understand how this can be, there are more
10 properties, more lands out there, let's take another
11 look. And that's where the additional criteria came
12 in, looking at sub-prime agricultural lands, looking
13 at somewhat smaller acreages and those types of
14 things, so --

15 Q. Well, if the site selection committee was
16 asking those questions, meaning that they didn't
17 have an understanding of what they were looking for,
18 it's even been much harder for this commission to
19 glean from what little we're getting from you and
20 the City exactly what has been done on site
21 selection.

22 I'm sure you're aware that this is over a
23 number of years now we've not only been asking about
24 the site selection and for answers from them, but we
25 have had these late presentations, very close to the

1 deadline -- July, you know, is just around the
2 corner -- and these hearings are presented to us on
3 the eve of a drop-dead deadline.

4 A. Uh-huh.

5 Q. This makes it very, very difficult for us,
6 and some of the witnesses, and I'm -- you have given
7 us a lot of information about what we could do, what
8 we should have done, what the sites -- what the City
9 should have done, I mean, what all of the should-
10 have-dones could be. This makes our job even harder
11 to try and figure out. One witness said, Let's just
12 close them out and that's the only way we will get
13 them to take seriously providing -- going to look
14 for the answers such as you have given us of many,
15 many recommendations today.

16 So I'm mentioning this because the
17 material that you've given us, while it's very
18 helpful, probably should have been given to the site
19 selection committee and maybe to even some of the
20 questions that have come from Dana -- I would have
21 loved to have had those questions go to the people
22 that were preparing this whole expansion or
23 drop-dead date or deferral, once again. I would
24 have liked these questions to have been presented to
25 them. Instead, they're being presented to us. We

1 are volunteer lay people. I happen to be an
2 attorney, but I'm not an expert such as you. It's
3 been very hard to figure out who's done what and who
4 hasn't done what. So I'm asking partly for my own
5 clarification to see just where we stand right now.

6 Do I understand that the site selection is
7 not only advisory but it is also made up of non-
8 professionals in terms of environmental scientists?

9 A. That is my understanding. I don't know --
10 I don't remember exactly who they are.

11 Q. I'm just looking at names, a few of the
12 names that are familiar there. There don't seem to
13 be any environmental experts, if you will, either
14 from the mainland by the previous group that was on,
15 or by the ones from R.M. Towill that is currently on
16 the site selection committee.

17 For a number of years, however, we've paid
18 experts to -- in the first site selection committee
19 and then on the second one to go out and find these
20 alternate sites and we've been promised them, but
21 they just don't seem to be coming forward.

22 A. Uh-huh.

23 Q. We're left with the feeling that the City
24 simply doesn't want to present alternative sites for
25 us. We've asked for them. We haven't received them

1 -- have danced around it for a number of years now,
2 but we're not getting any specific answers, and I
3 don't expect you to have those, because you're
4 certainly not in the site selection business right
5 now.

6 But my understanding is that this
7 committee is only advisory.

8 A. That's my understanding.

9 Q. -- that it probably would be able to
10 function better if it had been given some authority
11 to make not just recommendations but to make
12 something that would be mandated to be considered.
13 It seems like they've done a lot of wheel-spinning,
14 but I can't see where the City or anybody else has
15 taken up either their preparation for what they were
16 to do, or if they're coming up with recommendations,
17 there isn't anything that has been presented to us
18 that has indicated that we're even close.

19 A. Uh-huh.

20 Q. Am I right on the advisory aspect of that?

21 A. Well, just from my observations in
22 reviewing the meeting memory, it does not appear to
23 be very close. As I noted before, we're kind of
24 back at this top of the funnel. We're back looking
25 at the broader spectrum of sites, with somewhat less

1 exclusionary criteria and now evaluating those sites
2 again.

3 My concern is that maybe it will end up
4 going the same place it went before if the criteria
5 have not been, you know, fully developed and
6 weighted and so forth. And I am not sure, actually,
7 what the current list of criteria is, because some
8 new ones have come in. I'm not sure what's
9 happening with others.

10 Again, it does come back to that point of
11 really -- because like you say, it's a group of lay
12 people on the advisory committee, similar to how you
13 are, and that what you're trying to get with an
14 advisory committee. And every siting effort I've
15 done, I've had an advisory committee working with me
16 on it and working with the entity that was doing the
17 siting. And it was really to get that sense of the
18 community and sense of how the community weighs the
19 values and, you know, values different aspects of
20 environmental, social and economic factors that come
21 into play in siting of the facility.

22 I haven't necessarily seen that being here
23 -- it's almost a pretty high expectation of the
24 advisory committee coming up the criteria, coming up
25 with the weighting of the criteria and so forth and

1 maybe not getting as much help as they needed from
2 the consultant and the City. So it was definitely a
3 different approach than I have taken in the past on
4 siting efforts that have been successful, you know,
5 in how you go through this process.

6 Q. Well, apparently, Honolulu has not looked
7 into many of the areas that you've talked about. It
8 certainly hasn't stimulated any findings on their
9 part.

10 Would this committee have been more
11 effective if it had been given some semblance of
12 authority, rather than just advisory?

13 A. I really can't answer that. What I will
14 say is that I have seen in the past different levels
15 of -- and I won't say authority, but different
16 levels of expectations that the ultimate decision
17 makers have placed on their advisory committees, so
18 that the advisory committees really felt that they
19 were -- that they were given maybe not a mandate,
20 but a pretty clear expectation that, boy, what you
21 come up with we are going to take fully to heart in
22 how we determine the final decision here.

23 That's why most of the time what happens
24 is that -- and this is also to support the
25 environmental review process and the need for

1 multiple alternatives. It's that you're not
2 necessarily coming down to one site. You're coming
3 down to two or three, maybe four sites, and then
4 you're doing an environmental review on those sites,
5 and then that's what the decision is made on.

6 So the advisory committee gets you to that
7 point. It may even have a preferred site coming out
8 of that, but then it's -- ultimately, it does come
9 down to the council or to the county commissioners
10 or whatever entity it is that I'm working with to
11 make that final decision. Because they cannot cede
12 that decision to an advisory panel, but they can
13 certainly take the advisory panel's recommendation
14 fully to heart in how they make their decision. And
15 I don't know if that was a charge that was made by
16 the council or not, so I can't really go there.

17 Q. It doesn't seem that that charge was ever
18 made to either of the site selection committees, and
19 when you couple that with the fact that the City
20 from 1987 has promised that there was only going to
21 be a certain number of years that it would be in
22 effect, and then from that they were -- elongated
23 that expectation and it was like a moving target all
24 the way along the way. I'm left with the impression
25 -- and I don't expect you to really respond to this,

1 but the impression is that the City doesn't want
2 another answer. They simply want to stay in
3 Waimanalo Gulch until they get up to the top and
4 maybe go over to the other side, but this is all --
5 their mind seems to be only in this area. They're
6 not expanding. They say they're going to, but they
7 never do.

8 And as we have heard today, whatever
9 expert opinions come across, they just pick it apart
10 and, What about this, you didn't do this, where are
11 your standards and this and that. Those mandates
12 were never given to them, but then you are expected
13 to come forward with those. So we as commissioners,
14 or the council, for that matter, because they are
15 given -- or the Land Commission, for that matter --
16 if we are given an opportunity to hear all of this
17 and we come to a conclusion that is neither heard
18 nor acted upon, it leaves us with the impression
19 that we're just being used --

20 A. Uh-huh.

21 Q. -- and you're just being used and the
22 other experts are just being used and nobody is
23 really listening to it, and the City is certainly
24 not listening to it. They're just saying, Okay,
25 five more years, 15 more years. I mean, it's

1 changing all the time. So I doubt very much that
2 the Land Commission will have as much material
3 presented to them as we have had with this contested
4 case hearing. I seriously doubt that the City
5 Council will have this amount of expertise and
6 information presented to them. So I'm not sure that
7 we're getting anywhere.

8 CHAIRWOMAN PINGREE: I'd like to ask a
9 question.

10

11 EXAMINATION

12 BY CHAIRWOMAN PINGREE:

13 Q. As far as landfill development, I know you
14 have expertise in that area. Once a site is
15 selected and approved by the City, how long will it
16 take to develop, in your professional opinion?

17 A. So it is selected and gone through
18 environmental review?

19 Q. Uh-huh.

20 A. So it's ready to go?

21 Q. Uh-huh.

22 A. You know, actually, typically that takes
23 -- now, here in Hawaii it probably takes -- let me
24 step back. In a climate like Hawaii, it should take
25 18 months to two years, and that's design, design

1 review and development. That's in a perfect -- not
2 a perfect world, but at least that, you know, the
3 review process is timely and, you know, permitting
4 is timely and then able to roll right into
5 construction.

6 It is interesting, and it does go back to
7 some of my earlier comments about timing for
8 different -- and sequencing of different
9 construction pieces, because that obviously comes
10 into play; how much infrastructure is required prior
11 to it actually coming on line, is a major bypass
12 required, for instance, as part of that project, you
13 know, which would be more infrastructure, so maybe
14 that would extend it somewhat longer.

15 CHAIRWOMAN PINGREE: Thank you. James?

16

17 E X A M I N A T I O N

18 BY MR. PACOPAC:

19 Q. How much is the whole process?

20 A. Excuse me?

21 Q. The whole process, doing the EIS --

22 A. How much does that cost?

23 Q. Once you've selected a site. We've got to
24 do the EIS.

25 A. Okay.

- 1 Q. From then until the end of construction --
- 2 A. So we've done the EIS.
- 3 Q. No, we haven't done the EIS.
- 4 A. We haven't done the EIS yet. Okay. Yeah.
- 5 You do those as a separate piece. So you know,
- 6 environmental review on something like this, pretty
- 7 extensive. I mean, because you want to make sure
- 8 this is the right place and you're doing everything
- 9 right. So typically you're looking at for that
- 10 environmental review, but then all of the kind of
- 11 background documentation, that can be a couple of
- 12 million dollars. And then going into preliminary
- 13 design to support the solid waste permit, as well --
- 14 you know, which is both the characterization of the
- 15 site, as well as going on into design, that's
- 16 probably another couple million dollars.
- 17 Q. I'm looking at time, not the costs.
- 18 A. Oh. Timing?
- 19 Q. Yes.
- 20 A. Okay. So those pieces, that kind of comes
- 21 back to this idea that EIS and the support for that
- 22 and then the field studies and all that, probably
- 23 back that number I gave to you back up by another
- 24 year, year and a half.
- 25 Q. That's not seven --

1 A. So what we're talking about at that point
2 is about -- probably about three years.

3 MS. DAWSON: Actually, it's good to hear
4 this, because we've heard other estimates. In 1987,
5 sort of the history of this project -- I believe
6 they had everything prepared within two years.
7 Lately, when we have asked for a time, we are told
8 that even if we find a new site, it's going to take
9 seven years. So we're left with differing opinions
10 on how long -- once again, it's hard to take the
11 answers seriously. Somebody says two years.
12 Somebody says seven years.

13 BY MR. PACOPAC:

14 Q. I guess you have to add in the land
15 acquisition, also, in the process.

16 A. Yeah. And, you know, those are different
17 pieces to it. Although seven years is a long time.

18 Q. That's what we were trying to get to,
19 whether you think seven years is the normal time.

20 A. I would say not. And quite honestly, if
21 you're putting out a number of seven years, it's
22 somewhat of a self-fulfilling prophecy. If you're
23 saying, Oh, God, it's going to take us seven years,
24 that's how long it's going to take you. If you put
25 out and you push a schedule that says, We're going

1 to do this in three to five years and this is how
2 it's laid out and we're conservative, you know,
3 particularly in public review period, potential
4 appeals, those types of things -- and when you start
5 looking at appeals, yes, those are the pieces that
6 can really push it out there. That's why -- and
7 honestly, that's why in my earlier description of
8 the process and following through with a very
9 rigorous siting effort, getting you down into a
10 solid basis to do your environmental review -- the
11 reason I say that is so that you have a much better
12 project that is less prone to appeal, mainly because
13 it's well-developed, you have protected the
14 environment, you have essentially mitigated the
15 issues that it would be appealed on through that
16 process.

17
18 E X A M I N A T I O N

19 BY MS. DAWSON:

20 Q. I think that you also indicated that a
21 rigorous and comprehensive process was -- should be
22 developed for the site committee. If they do not
23 have that now, is there any point in waiting for
24 them to -- without this process, is there any point
25 in going back to the site selection group and

1 saying, Finish your job?

2 A. In my opinion, I think some corrective
3 action needs to take place, just in what has
4 happened so far, and corrective just from the
5 standpoint that a rigorous process hasn't
6 necessarily been followed, from what I'm observing,
7 and that that needs to happen so that you do come up
8 with a defensible decision at the other end. And I
9 don't see that there right now and, you know,
10 honestly, to save the time and get on a good
11 schedule, I would say it is better to bite the
12 bullet and do that now, as opposed to following and
13 finishing whatever process is there now that may not
14 come up with a reasonable, you know, group of
15 alternatives that can go into environmental review.

16 Q. From your studies, do you see any efforts
17 that are being made by the department, ENV, to have
18 the different by-products taken care of differently?
19 Is there any effort being made to dispose of food
20 waste in a different way? Is there any effort being
21 made to dispose of green waste in any other way,
22 other than H-POWER? Is there any of that going on
23 now?

24 A. Well, yes. Well, I mean, from the
25 standpoint of the new in-vessel facility that a

1 vendor is moving forward with, Hawaii Earth
2 Products, I think it is, or Earth System, that is
3 taking, my understanding, biosolids, green waste and
4 food waste, or it has the potential for all of
5 those.

6 What my earlier comment was on that is
7 that you need to be diligent in ensuring that that
8 happens, that process is followed through all the
9 way, that contract is signed -- I'm not sure if it
10 is yet -- with that vendor; that that vendor comes
11 on line, brings that process on line so it can
12 handle the biosolids that are not going through the
13 Sand Island plant. That was my point in my earlier
14 testimony, was that need to be diligent and for the
15 City to stay on that and there's no reason why that
16 shouldn't be on line. My understanding is it will
17 be on line next year. But that needs to be ensured
18 that that's going to happen, because that is a
19 resource that should not be going out to a landfill
20 anymore.

21

22

E X A M I N A T I O N

23

BY CHAIRWOMAN PINGREE:

24

25

Q. Mr. Miller, if we were to divert all of
that what you called odorous material -- I think you

1 had mentioned food and of course green waste. I'm
2 not sure what else would give off the odor that I
3 know the community is subject to -- could you then,
4 as a professional, say that there would not be any
5 smell coming from the landfill?

6 A. If all of the putrescible waste no longer
7 goes in there, so all that stuff that can decompose,
8 if it's no longer in there, that would significantly
9 -- I would say probably more than 90 percent remove
10 the odor issues at the landfill.

11 One thing, though, is that it's still a
12 landfill. It was prior a landfill. So you still
13 will have odors generated from the waste that's
14 already there. That's where you have an active
15 landfill gas system and the flaring of that gas and
16 ensuring that those systems are kept on line, are
17 optimized to control gas, eliminate gas emissions
18 and ensure that it's fully flared. That's really
19 what it takes. It's those two issues. Get all of
20 that organic out of there and then ensure that the
21 gas system is taking care of the waste that is in
22 there, you know, at that time of closure of all
23 municipal -- or of all organic wastes.

24 CHAIRWOMAN PINGREE: Thank you.

25

E X A M I N A T I O N

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BY MS. DAWSON:

Q. Were you saying that the City was working on some possible contracts with vendors who would take some of this material, food waste or green waste or other by-products that come out of the trash -- is some of that going on now?

A. I am not exactly sure where the City is on that right now, but I know that is happening right now, and I believe they're in negotiations, I think, still with that.

MS. VIOLA: The contract is already signed.

THE WITNESS: Okay. Great.

MR. VIOLA: Tim testified to that.

THE WITNESS: Okay. I couldn't quite remember if it had been signed or not, but I knew that was on line and that will be taking biosolids from all of the plants except for Sand Island.

CHAIRWOMAN PINGREE: Did you have a question, Jim?

E X A M I N A T I O N

BY MR. PACOPAC:

Q. Being you're an expert in your field, what

1 if -- what alternatives or actions do you think the
2 City would have to do if the landfill closes July
3 '12, this year? What alternatives do they have?
4 What options do they have?

5 A. If the landfill closed to --

6 Q. If they don't get it renewed.

7 A. -- to MSW?

8 Q. Yes.

9 A. But ash can still go up?

10 Q. Yes. Whatever the -- the ash still can go
11 in.

12 A. So if it came to that, my sense would be
13 to have to negotiate a contract for, most likely,
14 off-island disposal, if no other option is
15 available, which is particularly at this point
16 H-POWER. I mean, that is your option --

17 Q. The alternative?

18 A. -- for MSW, and to be able to take that
19 there and maximize its operation and, you know,
20 waste-to-energy generation there at that plant. And
21 that's ultimately where you want to get to.

22 Q. What about what the boiler cannot take?

23 A. What can it --

24 Q. Can it take all the waste? Can it take
25 all the waste?

1 A. My understanding is that it should be able
2 to take nearly all the waste with the new boiler
3 coming on. Because it is a different boiler type
4 that can take bulkier materials.

5 CHAIRWOMAN PINGREE: It was my
6 understanding that they could take medical sharps.

7 BY MR. PACOPAC:

8 Q. Medical waste?

9 A. I didn't hear what you --

10 CHAIRWOMAN PINGREE: I was questioning
11 medical waste.

12 A. My understanding is that -- let me put it
13 this way: Other facilities that are that type, that
14 are more of a mass-burn type, not a pre-processing
15 type, can take medical waste. I'm not sure if they
16 have worked that into their operations plan here
17 with this plant since they're not quite on line yet.

18 BY MR. PACOPAC:

19 Q. It can be? It can be; right?

20 A. It can be, yeah. In fact, a lot of plants
21 like medical waste because it is very high energy
22 value. I mean, it's a great fuel. When you're
23 operating a plant like that, you're thinking fuel.
24 You're thinking fuel, so, you know, that's a big
25 piece of it.

1 Q. So they would have different alternatives
2 that they could do? I mean, it's not just a total
3 shutdown of the city?

4 A. I wouldn't see it that way, no. No.

5 Q. How much time do you think they would need
6 for us to reach this point if the City does close it
7 down or we do close it down?

8 A. To reach what --

9 Q. To be able to sufficiently take care of
10 all our waste.

11 A. So, in fact, site a new landfill, bring
12 that on line --

13 Q. Yeah.

14 A. -- bring on the other -- well, some of
15 these activities, they are in line and it sounds
16 like by next year that the biosolids should be fully
17 handled and should not have to go out to --

18 Q. The other burner?

19 A. Yep. The other burner will be on line.
20 That should be able to take pretty much everything
21 else. And I would say that, you know, by next year
22 no more putrescible material --

23 Q. A big amount would be depleted from going
24 into the dump?

25 A. Exactly. And particularly putrescible

1 materials going in and out there, yeah.

2 Q. What do you think of the volcano on the
3 Big Island?

4 A. Well, it's taking over neighborhoods.

5 Q. Why don't we throw all of our rubbish in
6 there? You're the expert.

7 CHAIRWOMAN PINGREE: He's serious.

8 MR. PACOPAC: I have to talk to the State
9 about that. We can even throw the ash in there.

10

11 E X A M I N A T I O N

12 BY MS. DAWSON:

13 Q. Do we now have a vendor who takes the
14 metal, purchases the metal from us and does
15 something with that?

16 A. I believe you have the attorney who
17 represents one of the metal recyclers here.

18 MR. SANDISON: Just to be clear, could
19 H-POWER take automobile shredder residue?

20 THE WITNESS: Can it, did you say?

21 MR. SANDISON: Could it take?

22 THE WITNESS: My understanding is that a
23 facility like H-POWER can take auto shredder waste.

24 The big issue with auto shredder waste for
25 a -- from what I hear at a waste-to-energy plant is

1 that it is so rich -- I mean, it is a very good fuel
2 and that some plants actually are not designed for
3 that rich of fuel. However, my sense is that given
4 the volume of auto shredder waste to the volume of
5 all waste in the system, is that it could be metered
6 in at such a rate that it would not cause a problem.
7 In fact, I talked to a waste-to-energy expert
8 consultant last week and he was telling me, yeah,
9 it's an issue, but they've gotten around it through
10 that, you know, through proper operation of the
11 facility, so --

12 MR. PACOPAC: I see a smile on your face.

13 MR. SANDISON: Are you aware of one on the
14 mainland that does that?

15 THE WITNESS: I am not right offhand, but
16 I can check with them again.

17 BY MS. DAWSON:

18 Q. Under the provision that's before us now,
19 ash is one of the items that would continue to go
20 into the landfill.

21 A. True.

22 Q. By permitting ash to go into the landfill,
23 does that mean that there's no incentive to find use
24 of ash as a by-product such as combining it with
25 cement and using it in different forms of cement?

1 Does that mitigate against that effort by just
2 saying, Well, just put it in the landfill?

3 A. It shouldn't. It oftentimes is a concern,
4 that, wow, it's so easy to landfill, we'll just send
5 it all there. However, it's not free to landfill
6 and, you know, a lot of expense goes into the
7 design, the construction and the operation of a
8 landfill.

9 If you can keep waste out of there, you
10 can reduce those costs. It's not necessarily always
11 a one on one, but to some degree it is. So to the
12 degree that you can bring on the recycling and reuse
13 of that ash, it is beneficial to the City, and I
14 guess -- and what I had noted earlier, I think it
15 would be very beneficial for the City to continue
16 and to actually take on a more aggressive approach
17 to recycling its ash. I mean, again, it's a
18 resource. You know, don't just put it in a
19 landfill. It can be used for many different
20 purposes, particularly the fly ash as a cement
21 additive to concrete.

22 Q. There's been testimony about sending some
23 of our waste off-island, whether that's to another
24 island or to the mainland, and apparently we have
25 tried doing that and have been refused, at least by

1 the Big Island and by the Navajo people in Oregon, I
2 believe.

3 A. Actually, I believe it's the Yakima tribe
4 in Washington.

5 Q. Right. Is it worth exploring other areas
6 that we can send our waste to? If these two areas
7 are refusing to take our waste, do other states find
8 or -- some way to dispose or to send their material
9 out?

10 A. Yes. And the situation -- and you may
11 know the situation. Your waste, because of
12 Department of Agriculture issues -- and that was the
13 issue that the Yakima nation had with receiving
14 waste at the Roosevelt landfill, was because of
15 agricultural concerns -- that those are not concerns
16 within the continental states, because there's no
17 necessarily agricultural ban between the states over
18 there. It pretty much all falls under interstate
19 commerce over there.

20 So, for instance, Seattle's waste goes to
21 Oregon. There's waste in California, Napa Valley,
22 that goes to the Roosevelt landfill in Washington.
23 Those are -- they have no problem negotiating those
24 contracts. Those are private landfills that under
25 interstate commerce can bring that waste into their

1 fill. There's no USDA, Department of Agriculture,
2 issues with that waste movement, so that's why it's
3 a pretty free and open market there on the mainland.

4 But that was the issue here in waste being
5 able to be taken there, in my understanding. And I
6 don't recall where it went after that, if there was
7 further appeals or anything. I'm not sure what
8 occurred after that, so --

9 Q. That was my next question: Do you know of
10 any efforts that are being made by Hawaii to send
11 our waste elsewhere, where we have not been refused?

12 A. All I've seen is kind of what I've read,
13 and it doesn't appear that anything has happened
14 since then, since -- what was that; about two years
15 ago when that went down?

16 Q. Yeah.

17 CHAIRWOMAN PINGREE: Any other questions?

18 MR. PACOPAC: No.

19 CHAIRWOMAN PINGREE: Thank you, Mr.

20 Miller.

21 THE WITNESS: Thank you.

22 CHAIRWOMAN PINGREE: Thank you very much
23 for your time.

24 THE WITNESS: Thanks.

25 CHAIRWOMAN PINGREE: Mr. Chipchase, do you

1 have any more today?

2 MR. CHIPCHASE: Because of the late time,
3 I had to release my witnesses. They should be ready
4 to go first thing next week.

5 MS. VIOLA: We have an additional half
6 hour and those witnesses would be doing a ten-
7 minute summary. We could actually get to two
8 witnesses today. We could have those witnesses
9 today. We're supposed to have this time until 4:00.

10 CHAIRWOMAN PINGREE: But his witnesses are
11 not here.

12 MR. CHIPCHASE: Right. I mean, I had them
13 on standby. The direction the questions seemed to
14 be going and the time I thought we might need for
15 the commission to ask questions didn't seem to leave
16 too much time, and I didn't want to keep them
17 waiting so I released them.

18 MS. VIOLA: I think it's premature,
19 because we have an additional half hour.

20 MR. SANDISON: Can you call them back?

21 MS. DAWSON: It would be helpful.

22 MR. CHIPCHASE: I can certainly try. If
23 we take ten minutes, I can try to get maybe one of
24 them back here. What time is it? Half an hour, you
25 say?

1 MR. PACOPAC: By the time we have them --
2 just cut it already.

3 CHAIRWOMAN PINGREE: Dana, I understand
4 your concern. But he's released them. By the time
5 they come back here it could take fifteen minutes
6 and then we've got ten minutes to go, because we've
7 got to clear this room at 4:00 for another session.

8 What I would like to do is to use this
9 time to talk about next week. Next week we meet
10 again at 9:00, on March 14th. We're scheduled for a
11 full day.

12 What I need to know, please, is how many
13 more witnesses you have, Mr. Chipchase.

14 MR. CHIPCHASE: It looks like three.

15 CHAIRWOMAN PINGREE: How much time will
16 you need?

17 MR. CHIPCHASE: I don't think more than
18 half a day.

19 MS. VIOLA: Could you identify those
20 witnesses, Mr. Chipchase?

21 MR. CHIPCHASE: Sure. I think you and I,
22 Dana, had talked about that I would be calling Maeda
23 Timson, Senator Maile Shimabukuro. I think I
24 actually talked about that today. And then from my
25 witness list, I believe I'm going to ask Wilma to

1 testify.

2 CHAIRWOMAN PINGREE: What's her full name?

3 MR. CHIPCHASE: Wilma Namumnart.

4 MS. VIOLA: You'll have to subpoena her.

5 She's no longer with the City. She retired.

6 MR. CHIPCHASE: Okay. Then I'll do that.

7 MS. VIOLA: I have four witnesses, based
8 on the testimony today, for rebuttal. That would be
9 Harry Sharma (phonetic). Tim Steinberger we'll
10 probably recall --

11 CHAIRWOMAN PINGREE: You're going to
12 recall Tim?

13 MS. VIOLA: -- Gary Gill, who is the
14 deputy director of health at DOH, and Janice
15 Marsters, who is on the site selection committee.

16 CHAIRWOMAN PINGREE: Janice?

17 MS. VIOLA: Janice Marsters.

18 MR. CHIPCHASE: Well, with the exception
19 of Marsters, those witnesses will be over my
20 objection. Steinberger was here and testified. He
21 shouldn't be recalled. Harry Sharma and Mr. Gill
22 really should have been direct witnesses if the City
23 wanted to offer them. It's hard for the City to
24 hang back and present two and then at the end
25 present twice as many as it offered on its direct

1 case.

2 MS. VIOLA: We reserved the right to
3 rebuttal witnesses, and based on the testimony that
4 has been presented, these will be rebuttal
5 witnesses.

6 CHAIRWOMAN PINGREE: I'm going to allow
7 it. I need to know how much time you need.

8 MR. SANDISON: We may have one rebuttal
9 witness on the H-POWER issue.

10 CHAIRWOMAN PINGREE: And who would that
11 be?

12 MR. SANDISON: I don't know at the moment.
13 It would be very brief.

14 CHAIRWOMAN PINGREE: Dana, can you do
15 yours in half a day?

16 MS. VIOLA: I will try, and I'll limit it
17 to rebuttal issues.

18 CHAIRWOMAN PINGREE: What we're trying to
19 do, in the interest of time, is to wrap it up on the
20 14th.

21 MS. VIOLA: I don't anticipate -- well, I
22 don't intend to ask any questions of Maeda Timson
23 and Maile Shimabukuro, so based on the pretrial or
24 prehearing conference, I think we should limit their
25 testimony to ten-minute summaries, since that was

1 the agreed-upon arrangement. So I'm not sure of Ms.
2 Namumnart -- I'm not sure if the extent of the
3 questioning would require half a day, so I'm hoping
4 that I can limit my witnesses to, you know, to be
5 completed by 4:00 in the afternoon.

6 CHAIRWOMAN PINGREE: I'm going to go with
7 the assumption that the 14th will be our last day,
8 so I'm not going to schedule something thereafter.

9 MS. VIOLA: We do need time for closing
10 arguments.

11 CHAIRWOMAN PINGREE: Yes, you do. The
12 14th would be pushing it. Closing arguments, I
13 think we limited to half an hour.

14 MR. CHIPCHASE: I think we did, Chair.

15 MR. SANDISON: We did.

16 CHAIRWOMAN PINGREE: Will you be prepared
17 for closing arguments on the 14th?

18 MS. VIOLA: I don't anticipate that we
19 will have that one hour with all those witnesses.
20 There's eight witnesses potentially scheduled for
21 that day. We haven't gone through more than four a
22 day, so I don't anticipate that we'll have an
23 additional hour.

24 CHAIRWOMAN PINGREE: I've got to go back
25 to the schedule.

1 MS. VIOLA: Would you be willing to do
2 closing in written form, submit in written form?

3 MR. CHIPCHASE: I think the value of the
4 written closing is not great and I think the time to
5 prepare is enormous, so I'd prefer not to agree to
6 that. I could be ready to close on the 14th if
7 we --

8 MS. VIOLA: In light of the timing and the
9 likelihood that we're not going to even finish the
10 eight witnesses on the 14th, I would propose written
11 closing arguments.

12 MR. CHIPCHASE: The written closing
13 effectively becomes submission of alternative
14 findings, you know, and you're cross-submitting our
15 findings and conclusions, essentially, so you're
16 doing that twice.

17 CHAIRWOMAN PINGREE: What I'd like to do,
18 then, is to look for an additional date, and I'm
19 going to plead for your flexibility therein, because
20 -- counsel is reminding me we have something on the
21 4th in a different matter, so possibly we could use
22 the 4th, as well. But my challenge is I have to
23 have a forum, and that's always a challenge. So,
24 again, the 4th, I can't even tell you a time at this
25 point, because I don't know when my first public

1 hearing or testimony is, what time that's scheduled
2 for. But I'll certainly find out quickly and make
3 sure to get that information to you. Thank you.

4 MR. SANDISON: We'll identify our rebuttal
5 witness in the next day or so.

6 CHAIRWOMAN PINGREE: Excuse me, please.

7 (Discussion off the record.)

8 CHAIRWOMAN PINGREE: What we had it
9 originally scheduled as, because we truly thought
10 we'd be finished on the 14th -- we allotted more
11 than enough time -- what we had planned for was on
12 3/27, March 27th, is proposed findings, and at that
13 time we had anticipated possible closing arguments,
14 but that was in written form. But from what I'm
15 hearing, I want to give you the opportunity to
16 present orally. Okay.

17 MR. CHIPCHASE: We could certainly do that
18 that day if the commission is available.

19 CHAIRWOMAN PINGREE: We didn't set a
20 commission hearing date that day.

21 MR. CHIPCHASE: I see.

22 CHAIRWOMAN PINGREE: But I'd still like
23 the proposed findings March 27th.

24 MS. VIOLA: If the proposed findings, as
25 Cal indicated, is very similar to closing, why would

1 it be difficult to do written closing at that time,
2 as well?

3 MR. CHIPCHASE: I just don't want to do
4 two separate written projects. The time is just
5 enormous and the cost to my client is equally high.
6 So I'm absolutely prepared to do a 30-minute or less
7 than that -- I don't need 30 minutes -- to close on
8 the 14th or any other day that the commission
9 selects.

10 MS. DAWSON: Under your estimate, you
11 think you can cover all of your witnesses and the
12 closing?

13 MR. CHIPCHASE: Well, I don't know what
14 Dana has planned for rebuttal. That's the wrench in
15 my plan, but I will end right when I said I would
16 and I can do the closing that day, as well.

17 CHAIRWOMAN PINGREE: It sounds like, Dana,
18 you're only going to be crossing one witness.

19 MS. VIOLA: Yes, if that.

20 CHAIRWOMAN PINGREE: One out of three?

21 MS. VIOLA: That witness would have to be
22 subpoenaed, so there's no direct testimony, so it
23 depends on what she says.

24 (Discussion off the record.)

25 MS. VIOLA: Perhaps it would be more

1 appropriate to have the proposed findings after the
2 closing, so we could submit it when we do our
3 closing on 4/4. It seems premature to do closing
4 after the findings.

5 MR. SANDISON: Generally, you want to know
6 what the other side is saying in closing before your
7 proposed findings of fact.

8 MR. CHIPCHASE: I'm fine with that.

9 CHAIRWOMAN PINGREE: Well, then, you know,
10 I've got to get back to you, because our schedule is
11 just -- as you know, we have certain time
12 requirements in between. Okay. I'll get back to
13 you. But it's tentatively 4/4.

14 MR. CHIPCHASE: You got it. Thank you.

15 CHAIRWOMAN PINGREE: Thank you.

16 MR. PACOPAC: Motion to adjourn.

17 MS. DAWSON: Second.

18 (Hearing adjourned at 3:55 p.m.)

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C E R T I F I C A T E

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STATE OF HAWAII)
) SS.
CITY AND COUNTY OF HONOLULU)

I, SUE M. FLINT, Notary Public, State of Hawaii, do hereby certify:

That on March 7, 2012, at 9:00 a.m., the foregoing contested case hearing was taken down by me in machine shorthand and was thereafter reduced to typewriting under my supervision;

That the foregoing represents to the best of my ability, a true and correct transcript of the proceedings had in the foregoing matter.

I further certify that I am not an attorney for any of the parties hereto, nor in any way concerned with the cause.

This 225-page transcript dated March 7, 2012, was subscribed and sworn to before me this 11th day of March, 2012, in Honolulu, Hawaii.

Sue M. Flint

SUE M. FLINT, RPR, CSR 274
Notary Public, State of Hawaii
My Commission Exp: July 23, 2015

