

IN THE ARBITRATION UNDER CHAPTER 11
OF THE NORTH AMERICAN FREE TRADE AGREEMENT
AND UNDER THE UNCITRAL ARBITRATION RULES
BETWEEN

-----x	:
METHANEX CORPORATION,	:
Claimant/Investor,	:
and	:
UNITED STATES OF AMERICA,	:
Respondent/Party.	:
-----x	:
	Volume 5

SECOND FINAL AMENDED TRANSCRIPT

Friday, June 11, 2004

The World Bank
1818 H Street, N. W.
MC Building
Conference Room 13- 121
Washington, D. C.

The hearing in the above-entitled matter
came on, pursuant to notice, at 9:00 a. m. before:

- V. V. VEEDER, Q. C. , President
- PROF. W. MICHAEL REISMAN, Arbitrator
- J. WILLIAM ROWLEY, Q. C. , Arbitrator

Also Present:

SAMUEL WORDSWORTH,
Tribunal Legal Secretary

MARGRETE STEVENS,
Senior ICSID Counsel
Tribunal Administrative Secretary

Court Reporter:

0611 Day 5

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1 P R O C E E D I N G S

2 PRESIDENT VEEDER: Good morning, ladies
3 and gentlemen. Before we begin day five of this
4 hearing, on this day of mourning for the late
5 President Reagan, let us stand in silence to
6 remember him and his family.

7 (Moment of silence.)

8 PRESIDENT VEEDER: Mr. Dugan, we now turn
9 to your response to the United States's motion to
10 exclude certain evidentiary matters adduced by
11 Methanex, with which you also deal in your written
12 response, Claimant Methanex Corporation's Motion
13 Concerning Evidentiary Matters. We hand the floor
14 to you for your oral submissions.

15 MR. DUGAN: Good morning, members of the
16 Tribunal. I would like respond to the United
17 States's motion today in three ways. First of all,
18 I would like to call your attention to the law in
19 the United States with respect to the abandonment
20 of property, which we think is clear beyond doubt
21 concerning Mr. Vind's actions and Regent

1 International's actions in throwing away their
2 property.

3 Secondly, we will deal with the Brea city

4 ordinance, which we believe--which is invalid.

5 And third, we will go to the equities of
6 the case, and we will argue why, even if it could
7 be shown that the collection of the documents was
8 illegal, it would nonetheless still be appropriate
9 for--which it cannot be shown, by the way--it would
10 nonetheless still be appropriate for the Tribunal
11 to accept the documents into evidence.

12 Now, we prepared a set of binders. Some
13 of the material in the binders we will be referring
14 to explicitly.

15 We've also--I've got some other cases that
16 we did not have time to put into the binders, and I
17 will read from them and read a citation into the
18 record, and we'll try to do our best to get copies
19 of those documents to you, as well. I'm sorry
20 they're not actually in binders. We just didn't
21 have time to actually complete the process.

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1 Now, I would like to turn, if I could, to
2 the first case cited in the book that we gave you,
3 which is entitled Ananda Church of Self-Realization
4 versus Massachusetts Bay Insurance Company, which,
5 as you might expect from the title, is, indeed, a
6 California case. And if you can turn to page six,
7 please. On page six it states, "Documents which
8 have been placed in an outdoor trash barrel no
9 longer retain their character as the personal
10 property of the one who whose discarded it. By
11 placing them into the garbage, the owner renounces

12 the key incidence of title, possession, and the
13 right to control.

14 And then further down, citing an 1891
15 treatise or article on the law of property, "A
16 thing is abandoned when the owner throws it away or
17 leaves it without custody because he no longer
18 wishes to no longer account it his property."

19 That's the basic principle, and it's been
20 a principle that's been embraced by the United
21 States in virtually every court in the United

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1 States.

2 PRESIDENT VEEDER: Could you just help us.
3 What kind of trash barrel we're talking about in
4 this case?

5 MR. DUGAN: In this case, agreed--well, it
6 is certainly outside the offices of--I think it's
7 important to remember exactly what Mr. Vind
8 testified that he did. He dis--

9 PRESIDENT VEEDER: Don't worry about
10 Mr. Vind. Just this particular case.

11 MR. DUGAN: I don't know. All it says is
12 an outside trash barrel.

13 ARBITRATOR REISMAN: Excuse me. So,
14 you're drawing your attention to the word "outdoor"
15 trash barrel?

16 MR. DUGAN: Well, no, I'm drawing
17 attention just to the general principle. When
18 someone with property throws it away, and we take

19 the position, regardless of where they throw it
20 away, they abandon it. And by abandoning it, they
21 lose also privacy rights, they lose all expectation

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1 of confidentiality. They lose everything
2 associated with that property. Makes no difference
3 where they it away.

4 ARBITRATOR REISMAN: If I may understand
5 the force of this authority, which I have never
6 seen before, it says here documents which have been
7 placed in an outdoor trash barrel. Are you
8 expanding that to putting it in trash in general,
9 or putting it in trash and then moving it outdoors?

10 MR. DUGAN: We're expanding it to just
11 putting it in trash in general. It's the act of
12 abandonment that is the operative legal act here,
13 and by abandoning property, an owner ceases to
14 become an owner of that property.

15 Now, the second case that we would like to
16 draw your attention to is Tab 2, which is the case
17 of The People versus Ayala, Supreme Court of
18 California, and we perhaps should have started with
19 this one first because this is the Supreme Court
20 case in California that establishes the same
21 principle for California, and we have highlighted a

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1 portion on page 22, and I think the operative--the

2 operative language is halfway down the highlighted
3 portion. "Moreover, the Trial Court found that he
4 had abandoned the containers, a factual finding
5 supported by substantial evidence and to which
6 accordingly we defer. Abandoning them, he
7 relinquished any expectation of privacy in them.
8 As a general matter, the overwhelming weight of
9 authority rejects the proposition that a reasonable
10 expectation of privacy exists with respect to trash
11 discarded outside the home and in the curtilage
12 thereof."

13 Now, it's interesting to see what the
14 curtilage, the definition of curtilage is. And we
15 do not have it for it you, but it is just a--from
16 Black's Law Dictionary. We will put it up on the
17 screen so you could see what it says. Curtilage is
18 the land or yard adjoining the house usually within
19 an enclosure. Under the Fourth Amendment, the
20 curtilage is an area usually protected from
21 warrantless services. That is the old law. I

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1 don't think that is the case anymore.

2 And the Ayala--I mean, the Ayala case that
3 I just cited, I think, makes that clear, that you
4 may search the curtilage. I think the important
5 thing here is within an enclosure because I think
6 that is where the dumpster here was, it was within
7 an unlocked enclosure that was often left open.

8 More importantly--

9 ARBITRATOR ROWLEY: Have you got a copy

10 for us of that definition?

11 MR. DUGAN: I'm sorry, we don't. We'll
12 give you a copy.

13 Now, the next case I would like to draw
14 your attention to we also do not have a copy of for
15 you. The case is U. S. versus Wolf, 375 Fed Supp. ,
16 949, Eastern District of Pennsylvania, 1974, and it
17 found that the term "curtilage" has no application
18 in the commercial sphere unless the backyard of a
19 business is not afforded the same degree of
20 protection as the backyard of someone's house.

21 So, I think the most appropriate way of

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1 viewing the area where the Regent International
2 dumpster was is curtilage, but I'm not sure
3 curtilage even applies to commercial property,
4 meaning that Mr. Vind and Regent International had
5 even less expectation or they had no expectation of
6 privacy, no expectation that the documents would be
7 kept private.

8 Now, dealing more with the question of the
9 specifics of the dumpster that we are dealing with,
10 the next case I would like to read to you from,
11 again I apologize we do not have a copy for you,
12 it's the case of Smith versus State of Alaska.
13 It's from the Supreme Court of Alaska, and the
14 citation is 510 Pacific Second, 793. And the quote
15 that I'm reading from is from page six of the
16 Westlaw printout.

17 "Turning to the dumpster in the case at
18 bar, we are impressed with the combination of
19 several factors. To begin with, this dumpster
20 accommodated several apartments; therefore, many
21 people living in the building, and certainly the

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1 superintendent, would conceivably have occasion to
2 look into it and scavenge about in the collective
3 heap.

4 "Secondly, all municipal pickups were made
5 from this dumpster. Therefore, any tenant in the
6 KM Apartments could be sure that periodically a
7 group of third persons would look into the dumpster
8 and possibly scavenge there.

9 "Third, the dumpster was located outside
10 the building in the parking area. Therefore, it
11 would be reasonable to expect the trash to be
12 accidentally removed from the dumpster by running
13 children, passing cars, stray dogs, and even a
14 visitor."

15 Now, that is not precise fit, but it
16 focused on a couple of factors that we think are
17 important here. This was a communal dumpster. All
18 the tenants from the building threw their trash in
19 there. It was accessible to all the tenants, and
20 anyone who threw their trash away in that building
21 could only expect that people would have access to

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1 it.

2 Next, I would like to turn to Tab 4, which
3 is The People versus Rooney case, a California
4 case, and I would like to go to page six. And on
5 page six, right at the bottom, the headnote number
6 10 states, "However, we disagree with the
7 defendant's argument that he had a heightened
8 expectation of privacy in the trash bin because it
9 was located within the curtilage of his apartment."

10 And going on to the next page, it says,
11 "Like the trash bin herein, the automobile
12 interior," and they're referring to a different
13 case called Terry, "was located in the subterranean
14 garage of the defendant's apartment building, and
15 upholding the warrantless search of the car due to
16 the existence of probable cause, Terry stated,
17 'Apparently the apartment garage was a common area.
18 The officers did not commit a trespass by entering
19 it.' "

20 And I think that is the same here. It's a
21 common area. It's not marked as being private,

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1 there's no marking saying "No Trespassing," and I
2 think there's no reason to believe that any
3 trespass was committed when the doors, which were
4 unlocked and often open, people went in and
5 recovered the trash.

6 Now, the Disney case that the United
7 States has cited was different in that respect. It

8 was a single leasehold. It wasn't a common area,
9 and the Court concluded there that there was, in
10 fact, a trespass.

11 Next is another case for which we do not
12 have a copy for you. The case is State versus
13 Sigarroa, S-I-G-A-R-R-O-A. It was the Court of
14 Appeals of Wisconsin; the citation is 674 Northwest
15 Second, 894. And in that case the Court was
16 talking about, again, about a dumpster, and
17 material recovered from that dumpster. "The trash
18 was placed," and this is page seven of the Westlaw
19 printout. "The trash was placed in a plastic
20 garbage bag that was tied at the top. The bag was
21 placed in a dumpster on private property well away

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1 from the road. The trash was not set out on the
2 curb for collection, and the only practical way to
3 access the dumpster was to travel 173 feet down a
4 private driveway past a private property sign. The
5 dumpster had lids, and while the dumpster could
6 be seen from the road, the trash inside could not.
7 On the dumpster were signs warning do not play in
8 or around or occupy this container for any purpose,
9 and do not play on or around. "

10 Now, despite those facts, the Court found
11 that the taking of material from that dumpster was
12 not illegal.

13 PRESIDENT VEEDER: Was this a criminal
14 case?

15 MR. DUGAN: This was a criminal case, and
16 we would argue that the criminal case, the Fourth
17 Amendment protections are arguably even more
18 stringent than they are in a noncriminal case.
19 So, in terms of the law of discarded
20 documents in the United States, we think it's
21 clear, and there is no doubt; when Regent

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1 International threw its document as way in its
2 trash cans, knowing that they would be picked up by
3 the cleaning service, that was abandonment. The
4 cleaning service, taking it even a step farther,
5 threw it into a dumpster in a common area, in an
6 area that was easily acceptable to the public
7 walking right past the doors, which were not locked
8 and which were often open. It's beyond doubt that
9 under U. S. law, Regent International and Vind had
10 absolutely no expectation of privacy or
11 confidentiality in those documents.

12 ARBITRATOR REISMAN: Just one
13 clarification, Mr. Dugan. Several times you've
14 said "doors which were unlocked and frequently or
15 often open." Does "often open" mean that they were
16 open, or that they were unlocked? Is it a synonym
17 for unlocked or for being open?

18 MR. DUGAN: No, no, I think that Mr. Vind
19 testified they were usually unlocked and that
20 sometimes the doors were open.

21 ARBITRATOR REISMAN: So, the doors facing

1 the hotel, holding the garbage, were open?

2 MR. DUGAN: From time--from time to time.

3 They were certainly unlocked.

4 ARBITRATOR REISMAN: Okay.

5 ARBITRATOR ROWLEY: Mr. Dugan, I recall,
6 perhaps not completely accurately, the testimony of
7 Mr. Puglisi, who advised us that the investigator
8 he hired had told him that, and documents had been
9 obtained from a dumpster that were located--was
10 located in a parking lot adjacent to a building. I
11 now hear you talking about doors being opened
12 frequently and otherwise unlocked, which suggests
13 to me that we ought not to rely on the testimony
14 that Mr. Puglisi gave. Am I right in that?

15 MR. DUGAN: I talked to Mr. Puglisi about
16 this, and he maintains that that's what he was
17 told.

18 With respect to his testimony, I think
19 it's important to remember a couple of things. The
20 United States decided not to cross-examine him, so
21 we did not go through the usual witness preparation

1 process. He had less--we had less than 24 hours to
2 bring him here.

3 He was not able to talk to the
4 investigator in California before he testified. He
5 insisted that's what he was told when he had talked

6 to the investigator five or six years ago.

7 I think the record shows that was his
8 honest recollection, and as far as he knows now, he
9 believes that that's what he was told. That's what
10 the facts were.

11 Now, with respect to what he testified as
12 to where the dumpster was, even if he was wrong,
13 and we don't know where the dumpster was in 1994--I
14 mean, 1996 and 1997. We know where it was, I
15 guess, when he took the picture now. We don't know
16 whether it was an alternative arrangement, but even
17 assuming that there wasn't, I think the substance
18 of Mr. Puglisi's testimony was, but for that,
19 correct. And in terms of the issues, the operative
20 legal issues here, it was completely correct.

21 We take the position it doesn't make any

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1 difference where the dumpster was, that the key
2 fact here is what Vind and Regent International did
3 with the documents. They you threw them away, and
4 they threw them away, and they were taken to a
5 communal area that was easily accessible to the
6 public right by the sidewalk.

7 And if that's the case, and Mr. Puglisi's
8 testimony was wrong, it doesn't have any legal
9 significance.

10 PRESIDENT VEEDER: Just to come back to
11 what you say is the effect of Mr. Vind's testimony,
12 you want to take us to the passages because in one

13 answer he did testify that the doors were kept
14 locked.

15 MR. DUGAN: Okay. We will. I believe he
16 also said that they were often not locked because
17 the cleaning people didn't do what they were
18 supposed to do, they were so lax, but we will see
19 if we can track down that testimony.

20 ARBITRATOR REISMAN: I want to make sure
21 that I understand which doors you're talking about.

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1 Are you talking about the pink doors on the
2 outside?

3 MR. DUGAN: Yes.

4 ARBITRATOR REISMAN: Or doors on the
5 inside which would have led to--

6 MR. DUGAN: No, I'm talking about the pink
7 doors on the outside.

8 ARBITRATOR REISMAN: So, Mr. Vind said
9 that the cleaning people were lax and they often
10 left the doors on the outside unlocked?

11 MR. DUGAN: Yes. We will check that. So
12 that anyone in the public could come up, open the
13 door, and walk in.

14 Now--so, again we think--

15 PRESIDENT VEEDER: What he said in answer
16 to your question:

17 "Now, you talked about the closed
18 trash area. Was that area locked?

19 "ANSWER: It was supposed to be
20 locked. I think in practice the meaning

21 people, being as lax as they were, did not

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1 keep it locked at all times."

2 I suspect that's the passage you have in
3 mind?

4 MR. DUGAN: That is the passage I have in
5 mind, and I think that the fact that the documents
6 were retrieved on a regular basis from that area,
7 and that's what the testimony is, corroborates the
8 fact that the doors were closed but not locked.

9 PRESIDENT VEEDER: The difficulty is
10 that's not what the testimony is.

11 MR. DUGAN: I'm talking about the
12 testimony from the investigators, and it's an
13 inference that I think we could draw from the
14 testimony of the investigators that the--that there
15 was access to--public access to the documents.

16 PRESIDENT VEEDER: The inference from the
17 testimony of your two witnesses is the documents
18 came from a dumpster in an outside area in a
19 parking area. It doesn't square with documents
20 being taken from a receptacle behind closed doors.
21 That's the difficulty that we have.

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1 MR. DUGAN: I understand that, but I
2 think--what I'm trying to point out to you is that
3 even if the documents came from an enclosure behind

4 closed doors, it has no legal significance. We do
5 have the testimony the doors were usually open.
6 They were usually left unlocked, and if they were
7 left unlocked, that establishes public access to
8 the area. And even if it's an enclosure, there is
9 still public access to the area, and that's what we
10 think is the key.

11 Now, let me back up for a second as well.
12 Remember, whether or not there was public access,
13 he abandoned these documents. He threw them away.
14 He gave up all rights. He's no longer the owner of
15 them once he threw them away. So, it's a separate
16 question about the access to the documents. But
17 there can be no doubt that he gave up all access,
18 he gave up all ownership in the documents when he
19 threw them away. He was not the owner of them.

20 Now, dealing with the Brea city ordinance,
21 it's a well established principle of American law,

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1 American common law, that city ordinances that
2 conflict with common law are invalid, and that
3 principle has been adopted by, I believe, most
4 states in the United States.

5 And if I could, I would like to turn to
6 Tab 7, and turn to page four of that and direct
7 your attention to the paragraph with the headnote
8 five to six. With the well established principle
9 in view that ordinances must be consistent with the
10 law of this state, it's either page five of five or

11 page four.

12 "We reached the conclusion that the
13 ordinance here considered does not meet that
14 requirement. The City of"--

15 ARBITRATOR ROWLEY: Where are you reading
16 from?

17 MR. DUGAN: It says page five of five or
18 page four.

19 ARBITRATOR ROWLEY: And on that page,
20 the--

21 MR. DUGAN: The second paragraph from the

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1 top in the left-hand column.

2 "The City of Huntington, by such
3 ordinance, included an element in the crime of
4 vagrancy not embraced within such crime as defined
5 by common law, which is now the law of the state.
6 Obstructing the street is not an element of
7 vagrancy at common law. Such ordinance being
8 inconsistent, the Council of the City of Huntington
9 did not have the power to adopt the ordinance in
10 its present form."

11 If I could read from another case for
12 which we did not provide you a copy, it is the case
13 of Winter versus Cain, C-A-I-N, from the Supreme
14 Court of Alabama, and the citation is 279 Alabama
15 481.

16 And the quotation I'm reading from is on
17 page six of the Westlaw printout, and it states,
18 quote, We mentioned these considerations, however,

19 to show why it seems to us that the ordinances here
20 violate the rule of the common law which requires
21 that city ordinances not be inconsistent with the

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1 policy of this state declared in *Verson B. Saliba*,
2 *supra*.

3 So again, Supreme Court of Alabama,
4 accepting and acknowledging the principle that city
5 ordinances must be consistent with the common law
6 of the state.

7 Up next is Tab 10. The case *Farmer versus*
8 *the Mayor and City Council of Nashville*. And if
9 you turn to the page marked 170 in the upper
10 right-hand corner, and I believe the material
11 should be highlighted for you. "No implied power
12 to pass bylaws and no express grant, general grant
13 of the power can authorize a bylaw which conflicts
14 with national or state constitution or with the
15 statutes of the state or with the general
16 principles of the common law adopted or in force in
17 the state.

18 Finally, I will just refer you to a case
19 from South Dakota. It's not in your book. The
20 case is *Rantapaa, R-A-N-T-A-P-A-A, versus Black*
21 *Hills Chair Lift Company*. The citation is 633

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1 Northwest Second, 196. And it states in there,
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2 "The first deficiency is that the ordinance
3 conflicts with South Dakota's statutory and common
4 law of negligence. A local governmental ordinance
5 conflicts with state law when its provisions,
6 express or implied, are inconsistent and
7 irreconcilable with state law."

8 Now, the final case I'm going to cite you
9 is a case from California. The California Supreme
10 Court has not spoken on this issue, but lower
11 California courts have adopted precisely the same
12 legal principle, and this is Tab 11. The third
13 page, which is page 181, and again, this is a
14 California court speaking, "A municipal ordinance
15 must consist with the general powers and purposes
16 of the corporation, must harmonize with the general
17 laws of this state, the municipal charter and the
18 principles of the common law.

19 So, we believe that it's an extremely well
20 established principle that all municipal ordinances
21 must be consistent with the common law of the

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1 state, including the decisions, for example, of the
2 Supreme Court of California.

3 Now, in the Supreme Court of California,
4 an owner has no rights in property that he has
5 discarded. There is no expectation of privacy in
6 property that he has discarded, and for a number of
7 reasons states cannot--I mean, cities cannot
8 interfere with that, and they cannot interfere with

9 access to discarded properties. Discarded property
10 of any sort.

11 The first reason for that is that
12 obviously police and other investigators are
13 entitled to have access to the documents that have
14 been discarded. If you interpret the Brea city
15 ordinance as prohibiting that, it's quite clearly
16 invalid. It cannot stand. It would not prohibit
17 any police officer, any investigative officer from
18 ever going into a communal area that is not a
19 trespass and obtaining those documents.

20 PRESIDENT VEEDER: You go further,
21 would n' t you--

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1 MR. DUGAN: Yes, I would.

2 PRESIDENT VEEDER: --because people could
3 go into a private area, say, Mr. Vind's office.

4 MR. DUGAN: Well, it depends. You might
5 have to have a warrant for that.

6 PRESIDENT VEEDER: He wasn't committing a
7 trespass for one reason or other, unless he was
8 invited in.

9 MR. DUGAN: If he was invited in, yes.

10 PRESIDENT VEEDER: But in the trash
11 besides Mr. Vind's desk, if there was a privileged
12 document or private document, you would say that
13 Mr. Vind had abandoned any ownership rights in that
14 documentation.

15 MR. DUGAN: Correct, exactly, that the act
16 of throwing it away is the act of abandonment, and

17 if invited in, yes, he could.

18 Now, the same is true for private persons
19 as well, so that the laws on torts, or negligence,
20 for example, like I just read, can be made
21 consistent. If this provision were read as

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1 creating some type implied private right of action
2 from Mr. Vind, it obviously could not stand, and to
3 that extent it's simply invalid. A state cannot
4 put prohibitions on the collection of trash that
5 are inconsistent with state laws concerning fact
6 that that is abandoned property, and to that
7 extent, the Brea ordinance is invalid.

8 Now, if I could--

9 ARBITRATOR ROWLEY: Do I understand the
10 situation, then, is under the law as you explain it
11 to us, a private citizen, private investigator,
12 police constable, may go onto private property and
13 take abandoned documents. And those documents,
14 absent reference to trespass, are legally obtained?

15 MR. DUGAN: Correct, and we think--

16 ARBITRATOR ROWLEY: And that the only
17 rights the former owner of the document has or the
18 only rights the former owner of documents have are
19 civil rights for trespass?

20 MR. DUGAN: Whoever owns the property
21 where the documents are taken from would have some

1 recourse for trespass. If it were a trespass, I
2 believe that is correct. But, for example, in the
3 situation we are dealing with, Vind could not
4 assert a right for trespass here. It wasn't his
5 property that was trespassed on.

6 ARBITRATOR ROWLEY: That's assuming that
7 the evidence is that the documents were taken from
8 the dumpster. If they were taken from the bins on
9 the weekend from his office, that would be a
10 different thing.

11 MR. DUGAN: Right, I understand that, but
12 there is no testimony to that effect, and that's
13 not what either of the two witnesses testified to.

14 THE WITNESS: Testified to.

15 ARBITRATOR ROWLEY: But I think the
16 testimony that we have as to how the documents were
17 obtained is an issue.

18 MR. DUGAN: That may well be, but I'm just
19 trying to point out that there is no testimony
20 whatsoever that the documents came out of the trash
21 cans within the offices. As Mr. Vind, I think,

1 conceded, that was speculation on his part or mere
2 guess. Anyway, the only testimony that's in the
3 record, depending on the weight that you give it or
4 probative value that you give it is that the
5 documents came from the dumpster.

6 ARBITRATOR REISMAN: Mr. Dugan, just to

7 follow on Mr. Rowley's question, Mr. Rowley's
8 description of the law that X may go on to Black
9 Acre, belonging to Black, take things from a
10 dumpster or a refuse and remove it is not a
11 violation of common law.

12 MR. DUGAN: If it's a trespass, it is. I
13 think, for example, if the property--

14 ARBITRATOR REISMAN: But you have given us
15 a line of cases in the second part of your argument
16 which says that city ordinances that violate common
17 law are invalid. So, I presume your proposition is
18 that the situation that Mr. Rowley just described
19 is a statement of common law.

20 MR. DUGAN: Ones inside the office
21 building? I would agree that inside the office

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1 building it may well be a trespass. I don't think
2 outside, where it's in a dumpster that's accessible
3 to the public that this is a trespass.

4 ARBITRATOR ROWLEY: Let's just assume the
5 following facts. The doors to the dumpster
6 enclosure are closed. The space behind the doors
7 to the dumpster enclosure is private property. If
8 somebody who is not authorized comes and opens
9 those doors and takes refuse from the bin, is that
10 a trespass?

11 MR. DUGAN: I would say no, unless it's
12 marked. I mean, it's like walking into, you open
13 the doors and you walk into a building. Any type
14 of public building--

15 ARBITRATOR ROWLEY: If I walk into your
16 house through a door that is closed and it is not
17 marked private, am I committing a trespass?

18 MR. DUGAN: I don't know the answer to
19 that.

20 ARBITRATOR ROWLEY: What is the difference
21 between what I say about walking into your house

1072

1 and opening the doors to that office building?

2 MR. DUGAN: If you recall the case that I
3 cited, that said there is a different expectation
4 of privacy in residential areas than there is in
5 commercial areas. This is a commercial area.
6 There is certainly no prohibition on anyone walking
7 into the doors of any commercial office building,
8 unless there is some type of barrier or security
9 device, or sign saying no entry. And I think the
10 same would be true with respect to the area where
11 the dumpster is. There was no sign. The doors
12 were unlocked. It was right next to a sidewalk.
13 People walking by could simply go up and open the
14 doors.

15 ARBITRATOR REISMAN: Mr. Dugan, I didn't
16 have a chance to read the cases that you've cited
17 to us with respect to compatibility of common law
18 and the city ordinance, but are any of them
19 directly on point with respect to the location of
20 trash on private property?

21 MR. DUGAN: With respect to the location

1073

1 of trash, no.

2 ARBITRATOR REISMAN: Do any of them have
3 anything to do with trash?

4 MR. DUGAN: There have been--there have
5 been, and there was at least one case, and I can't
6 remember which one it was, that said that the
7 municipal ordinances that prohibit the pickup of
8 trash, that regulate the pickup of trash, do not
9 create any expectation of privacy. I know it's
10 been cited in some of the cases there found that
11 there was no expectation whatsoever.

12 ARBITRATOR REISMAN: I'm just looking at
13 the cases that you've cited to us. For example,
14 the most recent one, Ferran v. City of Palo Alto,
15 that deals with the city ordinance providing that
16 laundries within or without city should pay a
17 license fee, and that was the issue that seemed to
18 be incompatible with common law. That seems to be
19 rather far from the case that you're concerned
20 with. And I wonder whether there were any of these
21 cases about compatibility of a city ordinance of

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1 factual import.

2 MR. DUGAN: The only one that comes close
3 to it is the Rooney case, which is Tab Number 4.

4 It doesn't specifically deal with the

5 common law. The only reason why I draw your
6 attention to it is because it does state on page
7 six, on the right-hand side, headnote nine at the
8 end of that paragraph, that the existence of any
9 many municipal ordinances which restrict the right
10 to collect in hallway trash to licensed collectors
11 whose activities are carefully regulated would
12 appear to refute the view that contents of one's
13 trash bags in the trash bins become public property
14 when placed in the bin for collection.

15 Now, the existence of those statutes has,
16 in effect, been ignored by the developing Clay case
17 law led by the United States Supreme Court, that
18 once you throw away property, it becomes discarded
19 trash that's accessible both to the police and to
20 the public.

21 So--and that's not--is a case where by

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1 implication or by inference the municipal
2 ordinances that would seem to conflict with this
3 common law rule were ignored.

4 ARBITRATOR REISMAN: I will read this
5 case, but just looking at the selection that you
6 have drawn our attention to, this would seem to
7 suggest that there would be no incompatibility
8 between a city ordinance like the one that has been
9 produced to us from the City of Brea and common
10 law. No incompatibility between them.

11 MR. DUGAN: Well, no, I don't think that
12 is true. If you read the ordinance of the City of

13 Brea to prohibit police officers or anyone else
14 from being allowed to go in, I think it is
15 incompatible with the rule.

16 ARBITRATOR REISMAN: With the common law.

17 MR. DUGAN: With the common law, and the
18 common law being the decisions of the Supreme Court
19 of California, that there is no expectation of
20 privacy with respect to garbage, and garbage once
21 discarded is accessible to anyone, including police

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1 officers and anyone else.

2 And if I could give you a further
3 citation, and this is in the Tab 19, and it's all
4 the way to page 26 in Tab 19, and it states there
5 that the majority rule--the majority of courts to
6 be confronted with the question have rejected the
7 argument that ordinances regulating the collection
8 of trash, rendered garbage searches and seizures
9 illegal, while in a minority of cases the existence
10 of ordinances regulating the pickup and disposal of
11 residential garbage has been cited in support of
12 courts' conclusions to invalidate warrantless
13 searches and seizures of garbage.

14 So, the majority rule in the United States
15 is that these types of municipal regulations are
16 simply ignored as being not operative if they
17 conflict with the policy of the state or the
18 Federal Government.

19 ARBITRATOR ROWLEY: On page 26?

20 MR. DUGAN: On page 26, paragraph--the
21 second full paragraph on paragraph 26.

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1 ARBITRATOR ROWLEY: Starting with "The
2 majority of the courts"?

3 MR. DUGAN: Correct.

4 ARBITRATOR ROWLEY: Could I, while my
5 microphone is alive, ask you whether you accept the
6 applicability of the test found in The People
7 against the Superior Court of the State of
8 California at Tab 5 at page five of six. The
9 highlighted provision to be applicable here, which
10 reads, "We have held that"--that's in the first
11 full paragraph of the left column, midway down
12 highlighted--"and we have held that an appropriate
13 test is whether the person has exhibited a
14 reasonable expectation of privacy, and if so,
15 whether that expectation has been violated by
16 unreasonable government intrusion." And you can
17 substitute "government intrusion" for the words
18 "private intrusion."

19 I guess the concern I have is does this
20 modify the abandonment concept that you made
21 reference to?

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1 MR. DUGAN: No, I would say not, for two
2 reasons. First of all, there is case law and I

3 haven't cited it to you, but it is within the case
4 I think we've provided to you. A person's
5 subjective expectation of privacy is irrelevant.
6 What is controlling is the objective--objectively
7 reasonable expectation of privacy, and I think that
8 the law is now clear that property that's discarded
9 is totally abandoned by the owner. He has no
10 expectation of privacy in it. Regardless of who
11 inspects it, whether it's a police officer or a
12 private individual.

13 ARBITRATOR ROWLEY: Well, that surely
14 can't be the case. If I put something in my bin
15 beside my desk, even if you're right and I
16 abandoned it, I do have an expectation of privacy.
17 I do--I'm speaking subjectively--I do not expect
18 somebody to come into my room and rummage through
19 the bin.

20 MR. DUGAN: Well, I think that that raises
21 a different question, which is a issue of trespass.

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1 And there are cases, for example, that say--

2 ARBITRATOR ROWLEY: Yes, but that goes to
3 the point of the expectation of privacy.

4 Is there not an expectation that people
5 will not enter property uninvited?

6 THE WITNESS: No, I don't think there
7 necessarily is.

8 PRESIDENT VEEDER: If I may intervene,
9 assume it's the cleaner, the cleaner in Mr. Vind's
10 office, he's coming in, or she, and that's in

11 accordance with Mr. Vind's expectations. His trash
12 bin will be emptied by the cleaner, so there is no
13 question of a trespass by the cleaner. And what
14 you're saying is that Mr. Vind, having put his
15 rubbish in his trash beside his desk, his trash
16 can, allowing the cleaner to take that--

17 MR. DUGAN: You could do it in either--I'm
18 sorry, you can do it in either of two ways. I'm
19 saying the act of abandonment is by Mr. Vind. And
20 if he expects, even if he has a reasonable
21 expectation of privacy within his offices, that

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1 reasonable expectation disappeared when it was put
2 into the dumpster.

3 So, because it's a communal area, because
4 it's in a commercial area, it's not a residential
5 area. Because it's right next to the sidewalk.
6 Because the doors aren't locked, because the
7 cleaning people are lax, all those things indicate
8 that when--certainly when the trash gets to the
9 dumpster there is no reasonable expectation of
10 privacy. Whether there is a reasonable expectation
11 of privacy in his own office I think is a different
12 question, but it's not the question, I don't think
13 that's before the Tribunal.

14 ARBITRATOR REISMAN: I wrote down a moment
15 ago--

16 MR. DUGAN: Pardon me?

17 ARBITRATOR REISMAN: I wrote down a moment

18 ago when you were speaking, Dugan property that has
19 been discarded has no expectation of privacy. That
20 comment, I think, provoked Mr. Rowley's question to
21 you about expectation.

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1 You then said that it's not an issue of
2 expectation but an issue of where the property has
3 been located. So, it's not a subjective test,
4 according to you. It's an objective test. It is
5 where the property had been located that determines
6 whether or not it's accessible to strangers.

7 MR. DUGAN: Yes, I believes that the law,
8 that one's subjective expectation of privacy is not
9 controlling. What's controlling is what is
10 objectively reasonable, and property that is
11 discarded into a dumpster in an area that is known
12 to be accessible to the public, because the doors
13 are unlocked and the cleaning people are lax, is
14 property that has been abandoned for all purposes
15 by the owner, and in which the owner, in this case
16 Regent International, can have no reasonable
17 expectation of privacy. Can have no expectation of
18 privacy. He threw it away.

19 PRESIDENT VEEDER: Your examination as to
20 the legality of the Brea ordinance, you will be
21 coming back to the Walt Disney case we showed

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1 yesterday because the California court referred to
2 the ordinance without any indication that it was
3 thought to be invalid.

4 MR. DUGAN: It did not rely on that
5 ordinance. I think that's right. It simply noted
6 the existence of the ordinance. And I think what
7 the Disney case relied upon was the fact that the
8 documents were obtained through a trespass. Number
9 one.

10 Number two, I think the totality of the
11 facts in that case were much, much different than
12 it is here, quite obviously, from the whole tenor
13 of the decision. This is a much different case.
14 This is a case where there has been testimony from
15 the parties that they did the exact opposite of
16 what they did in the Disney case, where they kept
17 records of what came in. They tried to--you could
18 credit the testimony, which we certainly do, they
19 did their best to stay within the law, to operate
20 legally, to take careful records of what they
21 received so they would be able to respond to any

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1 type of subpoena or any type of discovery order,
2 and I think that the behavior of the parties in the
3 two cases is the difference between night and day.

4 PRESIDENT VEEDER: But did you accept that
5 if you interpret the Brea ordinance as being
6 limited to a situation where there is a trespass,
7 it would be valid?

8 MR. DUGAN: I don't think the Brea

9 ordinance is valid at all. I think more that the
10 law of trespass controls. I think it's more
11 significant, and as we'll get to, I think that's
12 what controlled how the claimant in this situation
13 ran its operations.

14 PRESIDENT VEEDER: So I understand that
15 the issue of trespass is critical to the theory
16 that you're proposing, whether there was or was not
17 a trespass.

18 MR. DUGAN: I think it's very important,
19 yes.

20 ARBITRATOR REISMAN: Just to follow it up,
21 if I put my trash in a dumpster on my land, and I

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1 have a contract with a company to come and take it
2 away, obviously that company can come onto my land,
3 it has a license for the exclusive purpose of
4 coming and taking the trash. I haven't given a
5 license to any third party to come on to rummage
6 through the dumpster.

7 You're saying, if I understand you, that
8 once I put it in the dumpster on my land,
9 forgetting about the issue of the license that I
10 have given to the collector, any third party has
11 the right to come on and take it because I have
12 abandoned it and precisely because I've abandoned
13 it, it's no longer a trespass, the entry is no
14 longer a trespass on my property.

15 MR. DUGAN: Well, I don't think

16 trespass--trespass is important, but I don't think
17 it's controlling. I think you have to take into
18 account a lot of the other facts, as well. Where
19 on the land is it? The courts have made it clear
20 that trash that is on the edge of property private
21 and is publicly accessible is abandoned and is

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1 subject to search.

2 Trash that was kept on a dumpster in a
3 protected area far away from the street I think
4 would present a different issue, but here we are
5 talking about trash that is in an area right next
6 to the street, right where people walk past it,
7 behind doors that are not only unlocked, but with
8 cleaning staffs that are lax, and they keep it
9 open.

10 So, I think it's a totality of the facts.
11 And I think the concept of trespass is important,
12 but it may not be controlling. And I don't think
13 there was a trespass here because again, this was a
14 commercial area where people are expected to go
15 indoors, and these doors were not marked in any
16 way, and that would lead a person to think that in
17 a commercial area he could not go in those doors.

18 And I think that's critical because, you
19 know, office buildings which are not marked, people
20 expect to go into, and it's not a resident. It's a
21 commercial area. And I think that the totality of

1 the circumstances are that the owners did not do
2 enough to make sure that their property was secure,
3 that their property was secure from this type of
4 thing, and the law is clear that both police
5 officers--and remember, that's what the policy is
6 designed for, really, is to allow police officers
7 to have wide access to discarded material, that in
8 those circumstances police officers and the public
9 have access to--when they have easy access to this
10 material, it's not protected. That's, I believe,
11 the thrust of property law in the United States.

12 ARBITRATOR REISMAN: And the references to
13 common law, that is that ordinances must be
14 compatible with common law, in your view, was not a
15 reference to classical English common law, but it
16 is, in fact, to the decisions of the states of
17 the--in which the--of the state in which the
18 municipality is found?

19 MR. DUGAN: Yes.

20 So we don't believe that the Brea
21 ordinance has any validity here, and we think that

1 consistent with the rest of the law on discarded
2 property, that the collections from the dumpster on
3 Mr. Vind's property were perfectly legal.

4 Now, even if the Tribunal were to conclude
5 that that's wrong and that the City of Brea
6 ordinance made the collection of discarded property

7 somehow illegal, we still think that the material
8 should come into evidence here for a number of
9 reasons. First of all, there is no doubt that
10 these documents are authentic. They are what they
11 purport to be. They're Regent International
12 records. And given what Mr. Vind himself has said
13 about them, there is simply no doubt from an
14 evidentiary point of view that they are authentic.

15 Secondly, they are probative. They go to
16 the very heart of this case. The telephone
17 records, the telephone message books that we have
18 put before you, and that we would like to
19 cross-examine Mr. Vind on, make it clear that there
20 was a substantial amount of contact between
21 Governor Davis's office and Mr. Vind, contrary to

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1 what he intimated in his testimony.

2 And those, I think, those are critical
3 issues.

4 And again, you know, in terms of the
5 authenticity and the probative value, there is no
6 doubt as to the truth of the matters that are
7 contained within them, I don't think. You have a
8 message slip from Governor Davis's office
9 asking--calling and leaving a message asking about
10 a donation, question mark. I don't think that
11 there is any doubt that they proved the truth of
12 the matters contained within them. Governor
13 Davis's office did, in fact, call and did ask about

14 a donation, and that certainly is consistent with
15 Mr. Vind's testimony.

16 Third, Professor Reisman, in your article
17 about this issue, one of the things that you
18 mentioned was the need to balance the competing
19 interests of the two parties, and we think that's
20 right. We think what's appropriate here is the
21 balance of competing interests of the two parties.

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1 You have on the one hand the United States
2 Government with a budget of X trillion dollars that
3 has nine lawyers here, and I don't know how many
4 lawyers in the back rooms working away. You have a
5 private claimant that is doing its best to obtain
6 the evidence to prove its case. There is a great
7 mismatch in resources and the ability to get things
8 done. Parties are not in equal power, equal power
9 parity.

10 In addition, the United States has
11 thwarted all the efforts of Methanex to obtain
12 relevant evidence. It's refused to produce the
13 NAFTA negotiating history, which we will go to
14 in--next week at some point, but I point out that
15 they have produced negotiating texts in other
16 cases. They refused to produce them here.

17 They blocked Methanex's long-standing
18 attempts to try to obtain relevant third-party
19 information, third-party evidence, including the
20 very evidence that we are talking about here,
21 evidence of both documents and testimony from

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1 Mr. Vind. Had we been allowed to use Section 1782,
2 this is the type of evidence, this is precisely the
3 type of evidence that we could have obtained from
4 Mr. Vind. And, in fact, I have no reason to doubt
5 that many of these documents are in his files, and
6 we could have gotten them that way. But the United
7 States blocked that, and we were not able to take
8 advantage of the procedures that exist.

9 Third, I mean, I think that as I said,
10 with respect to example, for the extent of the
11 relationship from Mr. Vind--between Mr. Vind and
12 Governor Davis, for example, they can be used to
13 impeach him and to show that he was not being
14 entirely truthful with the Tribunal yesterday when
15 he talked about his relationship with Governor
16 Davis. So, the documents can be used in the
17 truth-seeking function of this Tribunal, which
18 clearly is one of the most important functions of
19 the Tribunal.

20 And finally, Methanex has done everything
21 it can to stay within the law. I think, and I hope

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1 you will believe that contrary to the behavior of
2 the plaintiff in the Disney case, Methanex has gone
3 out of its way to make sure that the operations
4 with respect to this document-gathering process

5 were consistent with the law and stayed within the
6 bounds of the law, and I think that's a very
7 important, equitable point. At no time did
8 Methanex understand that it was in any way
9 violating the law. If you credit the testimony of
10 the people who came in and testified, at no time
11 did they believe that they were violating the law,
12 and I think that subjective belief is very, very
13 important.

14 And the last piece of evidence that I
15 would like to put in is simply a photograph, and
16 Ms. Morisset mentioned that there came a time--I
17 can't remember the precise year when the operation
18 to collect the documents stopped, and it stopped
19 because I think Mr. Vind moved, and he got into a
20 different situation, and the dumpster had this sign
21 on it.

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1 The sign says: "Posted, No Trespassing,
2 Keep Out."

3 And this is what Ms. Morisset was talking
4 about yesterday, and I think this is very
5 significant in terms of showing the good faith of
6 Methanex. When they were confronted with the
7 situation, they asked the investigator to send a
8 copy, to send a picture of what the situation was,
9 and they looked at this, and it says: "Posted, No
10 Trespassing, Keep Out," and they decided to keep
11 out. At that point they ceased the collection of

12 evidence because they thought they could no longer
13 do it consistent with the law. And the date at the
14 bottom is 10/11/00.

15 So, I mean, I think you have a party here
16 that has been doing its best to obtain information
17 and has been thwarted in their attempts to do so in
18 a number of different routes but tried to stay
19 within the law, and when confronted with something
20 that would make it quite clearly a trespass, they
21 ceased the operations.

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1 And for all those reasons, Methanex
2 believes that these documents should come into
3 evidence. And actually, based on Ms. Morisset's
4 evidence, I would like to move this into evidence,
5 again. I know that this specific one hasn't been
6 authenticated, but I think her testimony is clear
7 enough to provide--

8 PRESIDENT VEEDER: Can you help us
9 identify the passage in the transcript where she
10 dealt with this?

11 MR. DUGAN: We'll try to find that.

12 ARBITRATOR REISMAN: Mr. Dugan, ask
13 another question. So, the date of this is
14 10/11/2000?

15 MR. DUGAN: 10/11/2000, yes.

16 ARBITRATOR REISMAN: And that's when the
17 operations to collect documents stopped?

18 MR. DUGAN: On or about then, I believe,
19 yes.

20 PRESIDENT VEEDER: You may mean page 719
21 of day three when she was asked why the

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1 investigation was terminated, we terminated
2 investigation because we requested that we do so.
3 The offices of Regent International had moved, and
4 the discarded documents were no longer in a spot
5 accessible to the public, dot, dot, dot, they were
6 behind a wooded fence with a no trespassing sign.

7 MR. DUGAN: Correct.

8 PRESIDENT VEEDER: That's what it said.

9 MR. DUGAN: That's what it said. X14.

10 (Exhibit No. X14 was marked
11 for identification.)

12 PRESIDENT VEEDER: Do you have any
13 objection to that?

14 MR. LEGUM: Not as to its admissibility.

15 MR. DUGAN: And just in conclusion for all
16 the above reasons, Methanex believes it would be
17 appropriate to have the documents formally
18 admitted, finally admitted, unconditionally
19 admitted so that we can use them to cross-examine
20 Mr. Vind.

21 One other point. We had expressed a

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1 willingness to withdraw Mr. Vind's phone book, if
2 the United States stipulated that it contained

3 Governor Davis's home phone number. We are still
4 willing to do that, to take it out of evidence.

5 PRESIDENT VEEDER: Does that apply to the
6 whole of the phone book or just that entry?

7 MR. DUGAN: We will withdraw the whole
8 phone book as long as the United States stipulates
9 that it contained Governor Davis's home phone
10 number and so that we can use that in the
11 cross-examination of Mr. Vind.

12 (Pause.)

13 PRESIDENT VEEDER: Mr. Dugan, yesterday
14 morning you indicated that if the United States
15 could put in the photographs of Mr. Vind's office,
16 and you recall that we allowed the United States to
17 do so, that you were minded, as you put it in your
18 words in the transcript at page 754, if that's the
19 case, we would like to have the chance to put in
20 rebuttal testimony from the investigators
21 themselves, videotape, video testimony. Is that

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1 the application you are pursuing?

2 MR. DUGAN: No, it's not an application we
3 are pursuing, unless the Tribunal wants to hear
4 from -if the Tribunal thinks that's critical, we
5 can pursue that.

6 PRESIDENT VEEDER: What is the factual
7 assumptions that you're making in regard to how
8 these two investigators called the documentation?
9 It's not an assumption they got it from an outside

10 dumpster in a parking area. That's right so far?

11 MR. DUGAN: That's correct. I'm assuming
12 that they got it from the dumpster as described by
13 Mr. Vind.

14 PRESIDENT VEEDER: You're assuming that
15 the doors were not locked at the time that they
16 sought entry?

17 MR. DUGAN: Correct.

18 PRESIDENT VEEDER: Or that the doors were
19 open?

20 MR. DUGAN: Or that the doors were open or
21 unlocked at the time they sought entry. So, I

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1 guess we are proceeding on the assumption that even
2 if the dumpster was at all times located behind
3 those doors, as Mr. Vind asserts, it doesn't affect
4 the legal analysis, but because they were next to
5 the sidewalk, unlocked and/or open, accessible to
6 the public, unmarked, and that they were communal,
7 that tenants on a regular basis would go down there
8 and put trash, that the trash collectors would go
9 in and pick up trash, that that was enough public
10 accessibility to render them abandoned, and
11 abandoned to the point where they could be
12 collected.

13 PRESIDENT VEEDER: Before we hand the
14 floor to the United States, just one further
15 question from the Tribunal, Mr. Dugan. You said
16 there was no question about the authenticity of the
17 documentation. The United States, nonetheless,

18 criticized the document which we have at Tab 13,
19 and Exhibit 151, the point about the date on the
20 back of the second page being inconsistent with the
21 apparent date of the draft itinerary.

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1 MR. DUGAN: No, I understand that, but
2 Mr. Vind has admitted that all the documents are
3 his. I think the admission of the owner that the
4 documents came from his files overrides any--

5 PRESIDENT VEEDER: He specifically admits
6 this?

7 MR. DUGAN: I think that was in the
8 documents that he numbered and referred to in his
9 witness statement, and he said these documents came
10 from my files, and I'm outraged. So, I think the
11 statement by the owner of the files that they came
12 from his files overrides any type of authenticity
13 objection that the United States can make.

14 PRESIDENT VEEDER: Do you have any
15 explanation of the apparent discrepancy, the facts
16 put to the date?

17 MR. DUGAN: No, other than what I pointed
18 out, tried to point out in the--I guess it was the
19 redirect of Mr. Puglisi. Perhaps it's human error,
20 perhaps they didn't label the page correctly, but,
21 no, I don't have any explanation for it.

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1 PRESIDENT VEEDER: Let's turn the floor
2 over to the United States.

3 MS. MENAKER: If we may, I would like the
4 chance to confer with my colleagues before
5 responding. Would this be a convenient time to
6 perhaps take a coffee break?

7 PRESIDENT VEEDER: How long do you need?

8 MR. LEGUM: One of the things that we will
9 be conferring about is whether, given the fact
10 these documents will not be referred to by any of
11 the witnesses who will be heard today, whether
12 particularly given the number of new authorities
13 that we have been exposed to for the first time, we
14 may come back to you with a proposal that we have
15 this continuation of the argument after lunch. But
16 if you don't mind, we would like to break now and
17 discuss that and advise the Tribunal in moments.

18 PRESIDENT VEEDER: 10 minutes? Is 10
19 minutes long enough for you to discuss that point?

20 MR. LEGUM: Yes.

21 PRESIDENT VEEDER: Let's break for 10

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1 minutes.

2 MR. LEGUM: Thank you.

3 (Brief recess.)

4 PRESIDENT VEEDER: Let's resume. But
5 before we give the floor to the United States, we
6 have all been diplomatically reproved by the
7 shorthand writer. He's finding it difficult, if we

8 cut each other off, to actually record the full
9 question or the full answer. So, I think if we'd
10 all bear in mind that there should be a slight
11 pause before we interrupt each other. We will do
12 our best, as I'm sure you will, too.

13 Now, the United States, what would you
14 like to do?

15 MR. LEGUM: We propose to resume the
16 argument after lunch. We don't believe that it
17 would be very long, at least our part of the
18 presentation, and so we would propose to go forward
19 now with Dr. Happel.

20 PRESIDENT VEEDER: Mr. Dugan, that seems
21 to make sense because we would also like to read

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1 through the materials that you gave us.

2 MR. DUGAN: We have no objection to that.

3 PRESIDENT VEEDER: So, let's schedule it
4 for after the lunch, but we don't want to interfere
5 with the flow of the testimony.

6 How long from the United States?

7 MS. MENAKER: How long we will need to--I
8 would say maybe 15 minutes or so.

9 PRESIDENT VEEDER: We may have some
10 questions as well, so we should at least double
11 that. Is that going to make it impossible to
12 finish with our three witnesses today?

13 MS. MENAKER: I don't know that.

14 PRESIDENT VEEDER: Mr. Dugan?

15 MR. DUGAN: Ms. Callaway thinks Happel's

16 cross-examination will be an hour or less, so we
17 certainly should be able to get Mr. Happel finished
18 by lunchtime, I guess I should say.

19 PRESIDENT VEEDER: Let's work on that
20 basis, then. Let's proceed with the testimony and
21 for the moment, we will tentatively reschedule the

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1 argument for after lunch, but we'll review it at
2 the end of the morning. So let's start with our
3 witness in five minutes.

4 MR. LEGUM: Mr. President, if I can add
5 one thing, it would be useful for the United States
6 to receive from Methanex as soon as possible copies
7 of the additional cases that they relied upon and
8 also there appears to be a significant page missing
9 from one of the materials that they provided.

10 PRESIDENT VEEDER: Mr. Dugan, can you help
11 on that?

12 MR. DUGAN: We'll do our best.

13 PRESIDENT VEEDER: Okay. Thank you.

14 (Brief recess.)

15 ANNE HAPPEL, RESPONDENT/PARTY'S WITNESS, CALLED

16 PRESIDENT VEEDER: Let's resume. We have
17 before us Dr. Happel. Dr. Happel, the Tribunal
18 invites you to make the declaration in the form
19 contained in the text before you. If you're
20 willing to make that declaration, we invite to you
21 do so now.

1 THE WITNESS: Okay. I solemnly declare
2 upon my honor and conscience that my statement will
3 be in accordance with my sincere belief.

4 PRESIDENT VEEDER: Thank you.
5 Mr. Pawlak.

6 MR. PAWLAK: Thank you, Mr. President.

7 DIRECT EXAMINATION

8 BY MR. PAWLAK:

9 Q. Dr. Happel, good morning. As you know, my
10 name is David Pawlak, and I'm an attorney with the
11 NAFTA Arbitration Division of the Department of
12 State, and I'm going to be asking you a few
13 questions about your reports this morning.

14 To start, let's consider your reports.
15 Could you please take the document labeled 13 JS
16 tab E. That's your December report.

17 A. Okay, I have that.

18 Q. Would you please turn to page two of the
19 document.

20 A. Okay.

21 Q. And is that your signature at the bottom

1 of page two?

2 A. Yes, it is.

3 Q. And what is the date of this document?

4 A. December 2nd, 2003.

5 Q. Is that your December expert report in

6 this case?

7 A. Yes, it is.

8 Q. Could you please take the document that is
9 labeled 24 JS tab C.

10 A. Okay.

11 Q. Would you please tell me, is this your
12 rejoinder report in this case?

13 A. Yes, it is.

14 Q. Would you please turn to page two of this
15 document, your signature page.

16 A. Okay, I'm there.

17 Q. Is that your signature on page two?

18 A. Yes, it is.

19 Q. And what is the date of this report?

20 A. April 22nd, 2004.

21 Q. If you could please keep page two open, if

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1 you would refer to the paragraph just above your
2 signature.

3 A. Okay.

4 Q. And there you acknowledge your independent
5 duty to this Tribunal that overrides any duty that
6 you may have to the United States as the party that
7 retained you in this case; is that right?

8 A. Absolutely.

9 Q. And is it in that spirit that you are here
10 to testify?

11 A. Yes, it is.

12 Q. And also referring to page two, just above
13 your signature, do you reaffirm that the contents

14 of your December and rejoinder expert reports are
15 true and correct, to the best of your information,
16 knowledge, and belief?

17 A. Yes, I do.

18 Q. Dr. Happel, could you please tell me about
19 your educational background, and if you would,
20 please begin with college.

21 A. I got a Bachelor's of science degree in

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1 microbiology from Purdue University, and that was
2 followed by a Ph.D. at Harvard University in
3 genetics and molecular biology.

4 Q. After you graduated from Harvard
5 University where did you begin working?

6 A. I did two post-docs following Harvard. I
7 went to Tufts Medical School first, where I studied
8 adhesion of bacteria to sand and soil, and then I
9 did a post-doc at Livermore before I became a
10 career scientist there, and I was looking at
11 sorption of actinides to bacterial surfaces,
12 particularly uranium and plutonium.

13 Q. When you say Livermore, you mean Lawrence
14 Livermore National Laboratory?

15 A. Yes, I do.

16 Q. And during your tenure at Lawrence
17 Livermore National Laboratory, was MIBE
18 contamination of groundwater one of your primary
19 areas of focus?

20 A. Yes, I started working on gasoline

21 releases to the environment in the mid-1990s and in

1107

1 1996, my focus turned to MTBE and continued to
2 focus on MTBE and regulatory programs around
3 underground storage tanks until I left Livermore.

4 Q. Who funded your research at the Lawrence
5 Livermore National Laboratory on groundwater
6 contamination?

7 A. Well, the research was funded jointly by a
8 variety of sources. I always tried to have a
9 public/private partnership on that, so we had money
10 from the State Water Resources control Board in
11 California. We had money from DOE fossil fuels, so
12 it was out of Oklahoma, I believe, was where the
13 office was. We had money from industry partners
14 like the Western States Petroleum Association and
15 the American Petroleum Institute out East.

16 Q. And when was your--when were your research
17 results published?

18 A. Our Livermore report evaluating the
19 impacts of MTBE to groundwater resources was
20 published in June of 1998.

21 Q. And that was before the UC report was

1108

1 released; is that right?

2 A. Yes, the UC report was released, I
3 believe, in November of 1998.

4 Q. And while at Lawrence Livermore National
5 Labs, did you serve on any national advisory
6 panels?

7 A. Yes, I was a member of the U.S. EPA Blue
8 Ribbon Panel which examined the role of fuel
9 oxygenates nationally in the reformulated gasoline
10 program.

11 Q. And how were you chosen to be a member of
12 that panel?

13 A. Well, my understanding is that my name,
14 because of my background and expertise in
15 groundwater impacts in California, was suggested by
16 several groups, but I knew for sure that it was
17 suggested by Dianne Feinstein's office.

18 Q. And were you one of 14 members of the Blue
19 Ribbon Panel?

20 A. Yes.

21 Q. Could you please describe briefly your

1109

1 role on the Blue Ribbon Panel on oxygenates?

2 A. Well, I came there, like I said, because
3 of my expertise in groundwater impacts in
4 California, so definitely they looked to me to be a
5 scientist that would evaluate data on groundwater
6 and ask good questions about that.

7 They also had a scientist focused on air
8 quality, but in general my role was as a scientist
9 from Lawrence Livermore National Lab was to ask
10 questions about data, no matter what issue came up.

11 Q. And when were the Blue Ribbon Panel report

12 conclusions issued?

13 A. The Blue Ribbon Panel report came out in
14 July of 1999, so that was approximately a year
15 after the Livermore report came out, and about six
16 to seven months after the UC report came out.

17 Q. And presently, you're a Managing Director
18 with EcoInteractive, Incorporated; is that right?

19 A. Yes.

20 Q. Could you describe for the Tribunal the
21 nature of the services that you provide at

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1 EcoInteractive.

2 A. We are a firm that specializes in a mix of
3 scientific and database management, so basically
4 our niche is focusing on very massive, large,
5 complex datasets and making the data accessible to
6 as many people as possible and improving the data
7 quality, so that people can make regulatory
8 decisions based on actual data.

9 Q. Could you please turn to page 68 of your
10 December report.

11 For the record, that is 13 JS tab E.

12 A. Okay, I'm at page 68.

13 Q. And do those pages reflect the works that
14 you've presented or published on groundwater
15 contamination?

16 A. I gave a lot of talks on MBE, so I have
17 only put a few of those in here. I think most of
18 these are actually papers.

19 Q. Okay. And have you published
20 peer-reviewed work on groundwater contamination?

21 A. The majority of these are peer-reviewed

1111

1 articles.

2 Q. Thank you.

3 Dr. Happel, let's consider very briefly
4 your opinions in this case. For that purpose,
5 could we please turn to page four of your rejoinder
6 expert report.

7 A. Okay.

8 Q. And that, for the record 24 JS tab C.

9 A. Okay, I'm at page four.

10 Q. Does the first paragraph of page four
11 identify the topics that you addressed in your
12 December report?

13 A. Yes, I covered underground storage tank
14 program, USTs, leaking tanks, impacts to public and
15 private drinking water data, and groundwater risk
16 from MTBE versus ethanol.

17 Q. Okay. And could you please identify what
18 was the principal methodological approach you used
19 in preparing these reports.

20 A. Well, as can you see from the reports, a
21 great deal of what I present is actually from doing

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1 real evaluations on real data, and the data was

2 from the Geotracker database from the State Water
3 Resources Control Board in California, which also
4 incorporates the drinking water data from the
5 California Department of Health Services.

6 Q. And based on your review of that data,
7 could you please highlight your principal
8 conclusions that are presented in the reports.

9 A. Well, and I should also say that also in,
10 plus data analysis, there was literature reviews in
11 some areas.

12 The main conclusions or findings can
13 really be divided into those same four areas. For
14 UST tanks, we find that even tanks meeting the more
15 stringent 1998 standards in California continued to
16 leak--the field studies were definitive showing
17 those tanks continued to leak and that the owners
18 were unaware of that leakage.

19 In the area of leaking underground storage
20 tank data, we find that MTBE groundwater pollution
21 really is a significant, widespread, and ubiquitous

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1 problem throughout California. There is 10 to
2 15,000 sites throughout California where MTBE has
3 polluted groundwater. Many of these polluted
4 groundwater sites are in very close proximity to
5 drinking water wells, both public and private
6 drinking water wells. For example, more than 5,000
7 public drinking water wells have one or more. Up
8 to 10 or more of these polluted groundwater sites
9 within a half mile, which on average, is the

10 capture zone or the area that those wells are using
11 to draw water from.

12 And we know that MTBE is largely resistant
13 to biodegradation, unlike benzene which is readily
14 biodegraded underneath both aerobic and anaerobic
15 conditions, under actual natural field conditions.
16 So, the MTBE isn't going away. The way that it is
17 attenuating is primarily dispersion.

18 Under--for the drinking water wells or
19 drinking water impacts, we know that both public
20 and private drinking water wells had been
21 contaminated, many of those wells have been shut

1114

1 down, and we know that MTBE alone, not benzene, is
2 contaminating these wells in the vast majority of
3 the cases. For example, from 1999 to 2002, if you
4 just look at the California Department of Health
5 Services drinking water database, you find that 90
6 public water wells reporting MTBE contamination one
7 or more times where only seven wells report
8 contamination of benzene one or more times. So,
9 even though gasoline is released and the gasoline
10 contains MTBE, we find MTBE is the one that's
11 contaminating the wells, which is consistent with
12 the other data I just said.

13 As far as ethanol, risk from use of MTBE
14 versus ethanol, the data, the review of the data
15 literature is very clear here as well, showing that
16 the expected negative risk from the use of ethanol

17 are less than the negative water quality impacts
18 expected from the continued use of MTBE as a fuel
19 oxygenate.

20 Q. Thank you.

21 My final question, based on your review of

1115

1 the data, what are your views of the findings and
2 recommendations of the 1998 UC report?

3 A. Well, I think if you consider the
4 Livermore report, then the UC report, and the Blue
5 Ribbon Panel Report, you find very consistent
6 overall recommendations and findings. And the data
7 that I've looked at today as of 2003, only further
8 substantiates those findings. So, I think it's a
9 very consistent story.

10 MR. PAWLAK: Thank you very much,
11 Dr. Happel.

12 PRESIDENT VEEDER: Thank you.

13 Ms. Callaway.

14 CROSS- EXAMINATION

15 BY MR. PAWLAK:

16 Q. Good morning, Dr. Happel. Thank you very
17 much for coming here to provide information to the
18 Tribunal and to respond to my question. My name is
19 Claudia Callaway, and I represent Methanex in this
20 action against the United States.

21 In your expert report and in your

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1 testimony today, you have testified about your
2 extensive educational background that gives you a
3 specialty in, among other things, microbiology; is
4 that correct?

5 A. Among other things, yes.

6 Q. It's as a microbiologist that you're
7 testifying today?

8 A. No, I'm testifying with an expertise in
9 evaluating data on groundwater impacts in
10 California. My team at Lawrence Livermore was a
11 multiple disciplinary team including analytical
12 chemists, microbiologists, modelers, risk analysis
13 experts, statistical experts.

14 Q. And Re do you fit in on that team? What
15 is your expertise, your scientific expertise?

16 A. I have expertise in all of those areas in
17 order to integrate the team.

18 Q. So as a--

19 A. At Lawrence Livermore you try to hire
20 national experts in all of these areas.

21 Q. Right. Lawrence Livermore is a world

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1 renowned--you would agree that Lawrence Livermore
2 is a world-renowned facility for scientific
3 research; is that correct?

4 A. Yes.

5 Q. And just as you read your statement today,
6 agreeing to candor to the Tribunal, as a scientist,
7 you would agree that your duty is to shed light on

8 the truth rather than to defend any prior research
9 that you have; is that correct?

10 A. Absolutely, and I think you will find my
11 record very consistent on that.

12 Q. And you would agree that the scientific
13 methods that you use are of critical importance to
14 conclusions; is that correct?

15 A. I would agree that my conclusions are
16 based on data analyzed by the methods that I used,
17 yes.

18 Q. So, the method that you use will have an
19 outcome on your data; is that correct?

20 A. I believe that the methods that I have
21 used are credible, valid methods for evaluating

1118

1 groundwater impacts.

2 Q. So, in answer to my question that the
3 methods you use will have an impact on your
4 results, the answer would be yes; is that correct?

5 A. You know, I'm really here to testify about
6 the groundwater data that I've analyzed, and if you
7 have a question about the methods that I've used, I
8 would be happy to answer that.

9 Q. Well, you know, these are very standard
10 questions for an expert witness.

11 Have you testified before as an expert?

12 A. I have been asked many questions about
13 MBE and about groundwater data in many different
14 venues, but I do not make a living out of expert

15 witness, no.

16 Q. That's not the question that I asked, and
17 I can break the question down.

18 A. Sure.

19 Q. You are serving as an expert witness here
20 today; is that correct?

21 A. I'm here as an expert in groundwater

1119

1 impacts, yes.

2 Q. Let me break it down again. Or let me
3 just restate it.

4 You are here as an expert witness;
5 correct?

6 A. Yes. I think I have both of those in very
7 big letters here, so I can attest that I'm here as
8 an expert witness.

9 Q. But just the answer is yes; right?

10 A. Yes.

11 Q. And as an expert witness who is a
12 scientist, you are committed to good science; is
13 that a fair statement?

14 A. Even as a scientist alone, I'm committed
15 to good science.

16 Q. And as a scientist alone, you are careful
17 to use sources that will not in any way influence
18 or bias your conclusions; is that correct?

19 A. In most of the work that we have done in
20 this area, we have used a statistical approach to
21 try and eliminate biases and noise in the datasets.

1120

1 Q. So, the answer to my question would be
2 yes; correct?

3 A. I'm not sure exactly what your question is
4 leading at, but we definitely try, as any scientist
5 would, to eliminate biases, to eliminate noise, to
6 try and reach valid conclusions.

7 Q. To sum up, the answer would be yes;
8 correct?

9 A. Fine.

10 Q. Well, it wouldn't be no?

11 A. No.

12 Q. You would never look at sources that would
13 bias your testimony or your conclusions; is that
14 correct?

15 A. Yes.

16 Q. Okay. From your report and your
17 testimony, it appears that you're very familiar
18 with a California Executive Order that was signed
19 by Gray Davis in March of 1999, regarding MTBE; is
20 that a fair statement?

21 A. That is a public record, and it is

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1 referenced in my documents. It's not part of the
2 groundwater dataset that I analyzed for these
3 reports.

4 Q. Would it be fair to say that you're
5 familiar with it?

6 A. Yes.

7 Q. So, the answer the to my question is yes?

8 A. No. You said very familiar with it, I'm
9 sorry.

10 Q. Are you stating that you're not very
11 familiar with the report?

12 A. I wouldn't want to have to reiterate that
13 order or details from it at this point. Of course,
14 I'm familiar with it in general.

15 Q. You're not saying that you didn't review
16 it in preparation for your testimony?

17 A. Let me go back to the fact that my reports
18 are based on analyzing data and literature on
19 groundwater evaluations. I'm not here to provide
20 testimony on the political motivations or orders
21 that were issued by California or other states

1122

1 regarding MIBE.

2 Q. Well, you understand that as an expert
3 witness, I am permitted to ask you about what you
4 have considered and what have you looked at in
5 relation to your testimony; correct?

6 A. Yes. We could go through my report and
7 see exactly where that is referenced in my report.

8 Q. Well, that's what I'm asking. You're
9 familiar with that; right? You're familiar with
10 the Executive Order; right?

11 A. Yes.

12 Q. And to say that you were very familiar,

13 that's not inaccurate, is it?

14 A. Or you could define--you could define
15 "very familiar," but I'm not sure--I'm more
16 comfortable with familiar. It is referenced in my
17 reports. I did not analyze that in my reports. It
18 has--so, I'm sorry, is there some particular
19 question about this?

20 Q. My particular question is just about your
21 familiarity with that Executive Order.

1123

1 And if--I don't mean to indicate in any
2 way that you don't analyze data properly. I'm just
3 wondering about your level of familiarity as I ask
4 you questions about the report.

5 A. Okay.

6 Q. You're aware that Governor Davis based
7 that Executive Order on an environmental risk; is
8 that fair to say?

9 A. I believe that was the wording in his
10 Executive Order.

11 Q. And you're also aware, are you not, that
12 Governor Davis did not mention any health risk in
13 that Executive Order; is that fair to say?

14 A. I would just like to state again that it's
15 not part of the analysis that I testified on in
16 these expert reports, but in general, I believe you
17 are correct.

18 Q. So, it's a fair statement; right?

19 A. Yes.

20 Q. I don't think that our Court Reporter can

21 take down head nods.

1124

1 A. Again, I believe in general that you may
2 be correct. I have--I am not testifying on what
3 was in or what was not in the Executive Order. The
4 data that I reviewed is literature and groundwater
5 data from California, and there is no groundwater
6 data or published literature in that Executive
7 Order.

8 Q. But you're an expert with regard to
9 groundwater in California and MBE in that
10 groundwater; is that correct?

11 A. Yes.

12 Q. And as an expert you certainly want to
13 know what current governmental regulation is
14 regarding that issue in the State of California; is
15 that correct?

16 A. You would not necessarily, as a scientist
17 analyzing data. You don't really have to know what
18 public policy is--is occurring, but because I was
19 giving so many talks and so many people were
20 interested in this, and it was in the newspaper in
21 California, you couldn't help but know about that.

1125

1 Q. But as an expert you would want to know
2 everything that the government has issued in
3 response to reports, wouldn't you?

4 A. Again, I'm going to repeat the answer that
5 I just gave previously, in that in order to analyze
6 groundwater data and in order to statistically
7 analyze groundwater data or review the literature,
8 one does not--one is not required to understand
9 public policy prosecution--any type of issuance or
10 orders from the Governor. They really don't affect
11 your results.

12 Q. But just generally, as an expert within
13 this area, you would want to know, would you not,
14 what the EPA or the California EPA or the Governor
15 or the President issued regarding MTBE and
16 groundwater; is that a fair statement. As an
17 expert.

18 A. I'm going to go over again the fact that
19 I'm really here to talk about the expert
20 information that I can provide the Tribunal, and
21 the expert information that I provided to the

1126

1 Tribunal relates to underground storage tanks,
2 leaking underground storage tanks, drinking water
3 impacts, the use of ethanol versus MTBE as a fuel
4 oxygenate. It does not relate to public policy. I
5 would be speculating to pretend that I was an
6 expert on public policy or on the Governor's
7 Executive Orders or--those are outside the domain
8 that I'm here representing as an expert.

9 Q. So, you're not concerned that the EPA
10 criticizes, say, a report by the UC? Or the UC

11 study? The UC-Davis study of 1998? You're not
12 concerned about that? Because it's public policy;
13 is that correct?

14 A. The groundwater data that was presented in
15 my 1998 report, the UC report, and--are very--and
16 in my presence (sic) reports, are very consistent
17 in showing, fully substantiating what we said in
18 the 1998 report. In terms of the EPA, I'm not
19 familiar with what their conclusions are.

20 Q. Is that because they are not important to
21 you as a scientist? And I think that's a very

1127

1 direct question.

2 I understand your desire to share your
3 views with the Tribunal.

4 PRESIDENT VEEDER: Ms. Callaway, I think
5 we feel you have gone as far as can you go in this
6 direction. You might want to move on.

7 MS. CALLAWAY: Okay.

8 BY MS. CALLAWAY:

9 Q. Are you familiar that Governor Davis did
10 not find a health risk in his order?

11 A. I think I answered that a few minutes ago,
12 that in general I'm familiar with that, but I'm not
13 an expert on the order.

14 Q. I understand you're not an expert on the
15 order. I just wonder if you recognize that no
16 health risk was found.

17 A. I believe in general that you are correct,
18 although that is my general understanding. I'm not

19 representing that I'm an expert in the analysis of
20 the Governor's Executive Order.

21 Q. Okay. Let me ask you about the detection

1128

1 of frequency of MTBE in California wells.

2 A. That would be a pleasure.

3 Q. Are you aware, and again, this is the
4 United States EPA, and I don't know if this is
5 something that matters to you, but are you aware of
6 the U.S. EPA's Web site stating, quote, it is
7 possible that your water would taste and/or smell
8 like turpentine if MTBE is present at levels around
9 or above 20 to 40 parts per billion?

10 PRESIDENT VEEDER: Before you go on to
11 that, you're reading a document with a reference?

12 MS. CALLAWAY: I'm coming from the EPA's
13 Web site. It's not something I wanted to introduce
14 into evidence. I'm just asking again an expert
15 who--

16 PRESIDENT VEEDER: That's all right. I'm
17 asking if it's in our bundles or not.

18 MS. CALLAWAY: No. we can get you a copy.
19 We could print that out, that's no problem, if you
20 would like that.

21 PRESIDENT VEEDER: We will see where it

1129

1 goes.

2 THE WITNESS: I'm not familiar with the
3 EPA's Web site or that quote off of their Web site.
4 That's not actually the--the taste and odor issues
5 are not actually covered in my expert testimony.

6 As I state in my expert testimony,
7 California's set an MCL, secondary MCL of five
8 parts per billion based on taste and odor
9 thresholds, and so my analysis looks at how
10 groundwater is impacted based on the MCLs that
11 California set. It does not examine whether those
12 MCLs are valid or where the taste and odor
13 thresholds should have been set.

14 BY MS. CALLAWAY:

15 Q. So, it doesn't examine any of the data
16 using the U.S. EPA's MCL of 20 to 40 parts per
17 billion; is that correct?

18 A. The relevant MCL in California is the
19 secondary MCL of five parts per billion because
20 that pre--in California prevents water providers
21 from serving water over five parts per billion to

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1 their consumers.

2 The other relevant MCL in California is 13
3 parts per billion, which is a health-based or
4 primary MCL which prevents California water
5 purveyors from providing water at that level due to
6 a health risk. But you have to remember that the
7 secondary MCLs are enforceable standards in
8 California, meaning that water suppliers cannot

9 serve their customers water over five parts per
10 billion MTBE.

11 Q. And again, the secondary MCL, that is
12 based on taste and odor; is that correct?

13 A. A secondary MCL is not a health-based MCL.
14 That's the primary MCL, and it is based on a taste
15 and odor threshold for MTBE, the secondary one.

16 Q. The secondary is.

17 Are you aware that the United States EPA
18 does not have a health based MCL for MTBE?

19 A. That's covered in my 1998 Livermore report
20 where we lay out the process for obtaining an MCL
21 and show that that would be about a 10-year to

1131

1 13-year cycle.

2 Q. So, you are aware that as of today, as we
3 sit here today before the Tribunal, there is no
4 United States enforced MCL for health for methyl
5 tertiary-butyl ether; correct?

6 A. I'm going to repeat my answer that in
7 1998, we laid out the framework showing that it
8 would be a very long process to get a national MCL
9 and that here in California there is a secondary,
10 as well as a primary MCL, and that those are the
11 enforceable standards here in California.

12 Q. Well, I think here in Washington, D. C. ,
13 where the U. S. EPA is, you will agree, won't you,
14 Dr. Happel, that there just isn't an EPA-issued MCL
15 for health; correct?

16 A. I think if you refer back to my 1998

17 report, and we can get that report out if we need
18 to look at it, that we could look at the process
19 for getting an MCL, and then we can show you where
20 the EPA is in that long process.

21 Q. Okay. So, if you have no knowledge or

1132

1 interest of the appropriate levels at which MCLs
2 should be set, how do you draw conclusions about
3 what MTBE detection levels should be appropriate?
4 I can't understand--and let me phrase this very
5 specifically.

6 Your expertise is acknowledged; correct?

7 A. I acknowledge my expertise. Do you
8 acknowledge my expertise?

9 Q. Absolutely, absolutely.

10 A. Great, we are all in agreement.

11 Q. But what I'm having a hard time
12 understanding is when I ask you a very basic
13 question, are you somehow defensive that the
14 U.S. EPA has not set an MTBE MCL health level?

15 A. I think this really goes back to my duty
16 here is to, as I understand it, is to try and
17 provide information that's relevant to these
18 proceedings, and so I don't intend to be
19 nonresponsive to your answers. What I intend to do
20 is try and provide in this very, very short period
21 of time information that's actually relevant, and

1 so sometimes a yes-or-no question--answer to me
2 could be off the mark, and so by answering with a
3 simple statement, I'm trying to provide relevant
4 information. If you'd prefer--if the Tribunal
5 would prefer a yes-or-no answer, I could--

6 PRESIDENT VEEDER: Well, Dr. Happel, it's
7 up to you whether you want to say yes or no, but to
8 the simple question I think that you were asked, is
9 there in Washington, D. C. today an MTBE MCL health
10 level, the answer is no.

11 THE WITNESS: The answer is no.

12 MS. CALLAWAY: Thank you. Thank you very
13 much, President Veeder.

14 BY MS. CALLAWAY:

15 Q. Going back to the levels that you do
16 acknowledge that exist in California, California's
17 MCL, as you have testified, and as is printed, is
18 at five parts per billion as the secondary MCL for
19 MTBE; correct?

20 A. Yes.

21 Q. Now, even using this conservative MCL of

1 five, MTBE was only detected at levels above that
2 five in approximately 1.2 percent of the wells
3 tested in your study; correct?

4 A. 1.37.

5 Q. Okay. 1.37.

6 A. Above five?

7 Q. Above five.

8 A. The study that I performed, and we can
9 turn to those pages as detailed in my report, maybe
10 we should go to the--

11 Q. I just to want ask you the question. Yes
12 or no. Do you know? You are familiar with your
13 report, and if you would like to review your
14 report, that's fine, but if you--and maybe you
15 could tell me the exact number of where--of the
16 percentage of wells tested in your report where
17 there was a PPB of above five.

18 A. Okay. When I did the analysis here, the
19 methodology I looked at was actually--well, I will
20 relate two pieces of information to you. From a
21 groundwater impact point of view, what we were

1135

1 concerned about is impact to groundwater resources,
2 so we looked at detections at any frequency, at any
3 concentration, because in many cases, wells are
4 turned off and are not sampled after five.

5 So, in that case we find that 1.37 percent
6 of the wells have detected MTBE one or more times,
7 whereas only .63 percent of the wells have detected
8 benzene one or more times.

9 Q. Well, going back to MTBE, the 1.3
10 percent--I'm sorry, 1.37 percent of the public
11 wells that had detections of MTBE, that was at any
12 level PPB; is that correct?

13 A. It--yes, that--yes, they had a detection.

14 Q. And that's whether it was less than five

15 PPB or less than 13 PPB; is that correct?

16 A. Yes.

17 Q. And in some cases it would be more than 13
18 PPB; right?

19 A. Yes.

20 Q. But you did not analyze how many wells
21 were above the five MCL?

1136

1 A. If we turn to the first report under
2 drinking water, you could see Table 10 on page 47,
3 you can see that a maximum detection is printed out
4 for each of the 140 wells. In general, I remember
5 that it was somewhere over 50 percent of the wells
6 had detections above five or 13.

7 Q. I'm sorry to interrupt, but is that
8 50 percent of the wells in which--

9 A. The maximum concentration. If you turn to
10 my--

11 Q. I'm sorry, let me ask. When you say more
12 than 50 percent of the wells, you don't mean
13 50 percent of wells tested. You mean 50 percent of
14 the wells in which there was a detect; right?

15 A. Of these 140 in this--

16 Q. 50 percent of the 1.37 percent; right?

17 A. Correct.

18 Q. So, that would be, if it's 50 percent, it
19 would be 6.85 percent, roughly? I'm sorry,
20 .0685 percent, that would be half of the 1.37?
21 Actually .685. Clearly it's a good thing I didn't

1137

1 go to engineering school.

2 PRESIDENT VEEDER: Why don't you put the
3 question again.

4 MS. CALLAWAY: Yeah.

5 BY MS. CALLAWAY:

6 Q. What is half of 1.37, and clearly, this is
7 not a math exam.

8 A. Well, if we just round up to 1.4, I think
9 we can say .7.

10 Q. You don't want to do something that is not
11 accurate. When I said 1.2, you corrected me to
12 1.37, so I want to be quite precise here from your
13 scientific expertise.

14 A. But that was a number that--

15 PRESIDENT VEEDER: Let's not waste time on
16 this one.

17 MS. CALLAWAY: That's fine.

18 BY MS. CALLAWAY:

19 Q. But let's be accurate. Would it be .685
20 as half of 1.37?

21 A. That's not a data point in the record. We

1138

1 could divide 1.37 by a half. I don't want to do
2 that.

3 Q. I would like to ask you this question
4 because we talked about methodologies; correct?

5 And the methodology you used was to look at the
6 detects; correct?

7 A. That was one of the methodologies.

8 Q. But you did not--you did not zero in on
9 how many of those detects were under five PPB, did
10 you?

11 A. We can count them up. There is a number
12 of reasons why I would not focus on that area.

13 Q. Again just a yes or no.

14 PRESIDENT VEEDER: This is a very, very
15 difficult area for us to follow.

16 MS. CALLAWAY: Okay, I apologize.

17 PRESIDENT VEEDER: We need the witness to
18 finish her answer before you start again.

19 MS. CALLAWAY: Absolutely.

20 PRESIDENT VEEDER: So, Dr. Happel, Take
21 your time. Just answer if you can directly, and

1139

1 then if you want to qualify your answer, please
2 feel free to do so.

3 THE WITNESS: There's a number of reasons
4 that we wouldn't focus exclusively on detects
5 greater than five parts per billion because we are
6 interested in impacts to groundwater resources.
7 Many wells like, let's take, for example, the well
8 publicized Tahoe wells. None of those wells in the
9 DHS database report detections above five parts per
10 billion. That's because they shut down the wells,
11 quit sampling and reporting those tests to the DHS
12 database as soon as the MTBE was detected in those

13 wells. Because when you have pollution nearby in
14 the shallow groundwater and you're sucking water up
15 through your drinking water wells, you don't want
16 to pull more contamination into the drinking water
17 well.

18 So, from a groundwater resources point of
19 view, you can lose a resource, you can have a very
20 severe impact to a resource, but you can have a
21 very low detection reported in the California

1140

1 public drinking water database, and that's because
2 you shut the well down and quit sampling before you
3 draw the contaminant further into your drinking
4 water supply.

5 So, from a health point of view, you might
6 be concerned about the concentration of water being
7 served to the consumer, but from a groundwater
8 resources point of view, what you're worried about
9 is the availability of that resource to be used to
10 serve water.

11 BY MS. CALLAWAY:

12 Q. And your report was done from a
13 groundwater resources point of view; is that
14 correct?

15 A. Correct.

16 Q. Rather than a health-specific point of
17 view; is that correct?

18 A. Correct.

19 Q. So, your methodologies reflect your

20 groundwater resources expertise; correct?
21 A. Yes, we are evaluating impacts to

1141

1 groundwater resources.

2 Q. Were you by any chance asked by the United
3 States to provide data specific to those wells
4 where there was more than five PPB MCL?

5 A. No.

6 Q. So, your methodologies only reflect what
7 you were asked to do by the United States?

8 A. No.

9 Q. I will rephrase.

10 Your methodologies reflect what you, as a
11 groundwater resources scientific expert, used in
12 preparing your report for the United States; is
13 that correct?

14 A. Yes, in that I used methodologies that
15 were valid for examining impacts to groundwater
16 resources.

17 Q. Impacts to groundwater resources, thanks.

18 Now, in the course of preparing your
19 expert reports, did you review Methanex's expert
20 report from Dr. Pamela Williams?

21 A. Yes, I did.

1142

1 Q. And the paper was entitled "Evaluating the
2 Risks and Benefits of MTBE and Ethanol as

3 Alternative Fuel Oxygenates"?

4 A. I reviewed both her expert report and her
5 rebuttal report.

6 Q. And her rebuttal.

7 Well, focusing on the expert report, are
8 you aware that Dr. Williams concluded that early
9 studies showing the presence of MTBE in wells were
10 not representative of actual drinking water
11 conditions? Are you aware of her statement?

12 A. Could you repeat that statement?

13 Q. Sure. And at this point I'm not asking
14 whether you agree with it. I'm just curious as to
15 whether you're aware of this statement.

16 Are you aware that Dr. Williams concluded
17 that early studies showing the presence of MTBE in
18 wells was not representative of actual drinking
19 water conditions?

20 PRESIDENT VEEDER: Before you answer,
21 could you give us the reference to that in her

1143

1 first report.

2 MS. CALLAWAY: I think that is going to be
3 at that beginning. And you know what? I'll go on
4 to another area so that we can will look for that
5 because I do want--there is no intent to sandbag.
6 I thought that this would be something because it
7 was an area of disagreement between the two
8 experts, I thought that this would be something
9 that would be an easy yes or no.

10 PRESIDENT VEEDER: I'm not suggesting any

11 sandbagging. It just that it's helpful if you
12 quote something if we could have a reference.

13 MS. CALLAWAY: You know what? We will get
14 that and we'll get that right now.

15 I'm going to switch to another area.

16 BY MS. CALLAWAY:

17 Q. As somebody who looks at the--and I
18 apologize, Dr. Happel, because, and I apologize to
19 Dr. Happel and I apologize to the Tribunal because,
20 Dr. Happel, I will admit that when I was looking at
21 your report I was assuming that one of your areas

1144

1 of expertise was examining water for health
2 benefits.

3 What you're telling me today is that your
4 expertise and that of your Lawrence Livermore team
5 is really about the impact on groundwater
6 resources; is that correct?

7 A. Yes.

8 Q. And I apologize earlier for asking you the
9 health-based questions and not understanding why I
10 did not get a direct answer, so I'm not going to go
11 into those again. But I would like to ask you
12 about your knowledge about MIBE and its
13 carcinogenic properties.

14 You have done, I know, extensive work
15 concerning MIBE in California groundwater. Have
16 you had occasion to review the carcinogenic or
17 cancer-causing nature of certain fuel additives?

18 A. I don't--I can't answer questions on the
19 carcinogenicity--the toxicity or the degree of a
20 carcinogen that MTBE is. That is outside my area
21 of expertise as a witness.

1145

1 Q. As somebody who is an expert with regard
2 to groundwater in California, do you come into--let
3 me rephrase that question because it didn't make
4 sense to me.

5 In assuring your expertise with regard to
6 California's groundwater, do you receive scholarly
7 journals that you read regarding groundwater and
8 its components?

9 A. Yes, I'm familiar with the literature.

10 Q. And do you also contribute to that
11 literature?

12 A. The articles that we examined earlier,
13 yes, I have contributed to that literature.

14 Q. And in reviewing that literature, have you
15 learned that benzene has carcinogenic properties?

16 A. I think I would like to refrain from
17 answering health-based questions.

18 Q. So, just to ask again, do you have any
19 knowledge about the carcinogenic--

20 PRESIDENT VEEDER: Before that question is
21 answered, how does this question relate to the

1146

1 scope of her expert report?

2 MS. CALLAWAY: In her expert report she
3 talks about--our expert, who clearly has extensive
4 expertise on impact to groundwater resources, has
5 used a level of five PPB, has selected a level of
6 five PPB, which is California's health level. And
7 in looking at that and commenting on benzene, which
8 she does comment on, and she talks about how
9 benzene is in fewer samples in her survey, we do
10 believe it is relevant that benzene is a
11 carcinogenic and is at one MCL PPB, whereas MTBE is
12 not a known carcinogenic in any of the scholarly
13 journals and is at five MCL PPB.

14 And we do--we submit that that is
15 relevant. And again, we would--it is not to test
16 our expert's knowledge of scientific expertise
17 regarding teratogenesis, any of that. It's really
18 about looking at that data in evaluating--she
19 mentions benzene. I don't think she was asked to
20 analyze benzene, but she throws benzene out anyway,
21 and I do think it's relevant that that is a

1147

1 carcinogen.

2 PRESIDENT VEEDER: And I ask the question:
3 How does this relate to her expert report because
4 these aren't levels which she's chosen. These are
5 levels set by others.

6 MS. CALLAWAY: Right, they are set by
7 others and they are set by the State of California,
8 but the EPA has set benzene at one because it's a

9 carcinogenic, and it would follow that you would
10 have less benzene in the water because it's
11 something that nobody is allowed to use, whereas
12 MTBE is permitted to be used in the rest of the
13 United States.

14 PRESIDENT VEEDER: That may be a fair
15 comment, but is that a question for this witness?

16 MS. CALLAWAY: If she feels that knowledge
17 of--you know what, if she does not--I do think it's
18 fair because, and this is why, President Veeder.
19 In talking about her team at Lawrence Livermore,
20 she talked about a member of expertises,
21 microbiology, the attenuation in water, and she

1148

1 talks about attenuation in her report when she
2 talks about aerobic and anaerobic breakdown of
3 MTBE in the water, and if she's looking at these
4 areas, and again, this is methodology. If she was
5 specifically asked to not, as a microbiologist, as
6 somebody who is one of her expertise is in
7 microbiology, she was asked to stay away from that
8 because it's significant here. I think that is
9 significant, but if the Tribunal wishes me to not
10 talk about the noncarcinogens, that's fine.

11 PRESIDENT VEEDER: The difficulty is we
12 don't see how it rises from the scope of
13 Dr. Happel's report under the rules agreed by the
14 parties and the subject of our order.

15 MS. CALLAWAY: That's fine.

16 PRESIDENT VEEDER: If you think it's from
17 her report, just show us the passage, and we will
18 look at it again.

19 MS. CALLAWAY: That's what we will do.
20 Then what I will do is go back to my
21 question.

1149

1 BY MS. CALLAWAY:

2 Q. I saw you were looking for Dr. Williams's
3 report. If you want to look at 12 A, JS tab E, and
4 that's Pamela Williams's report?

5 A. What page are we on?

6 MR. LEGUM: I'm sorry, could you give us
7 the JS cite again. Did you say 12 A?

8 MS. CALLAWAY: 12 A, JS tab E.

9 MR. LEGUM: I think that may not be quite
10 accurate. That seems to be the attachments to the
11 supplemental affidavit of Robert Wright.

12 PRESIDENT VEEDER: Ms. Callaway, we have
13 it in several different places. It was
14 Dr. Williams's first report?

15 MS. CALLAWAY: Dr. Williams's first
16 report.

17 PRESIDENT VEEDER: Wherever that is. We
18 have it in several different places.

19 THE WITNESS: What page?

20 MS. CALLAWAY: This is the one evaluating
21 the risks and benefits of MTBE and ethanol. I

1 could ask the question without referring to
2 Dr. Williams. I think that was really just a plug
3 for our expert.

4 BY MS. CALLAWAY:

5 Q. Let me ask you about your own research.
6 In 1998, you and your colleagues at Lawrence
7 Livermore estimated there were at least 10,000
8 sites impacted by MTBE; correct?

9 A. Leaking underground fuel tank sites where
10 MTBE had polluted groundwater.

11 Q. Okay. And you examined 236 leaking
12 underground storage tanks; is that correct?

13 A. In 1998 we had data from 236, 238, I don't
14 remember the number, leaking underground fuel
15 tanks. By 1999, we had data from 4,300 leaking
16 underground fuel tanks. By 2003, we have data from
17 almost 10,000 leaking underground fuel tank sites.
18 And the data between those three datasets is
19 completely consistent, so that now we know that
20 there is almost 10--that there are--have already
21 been shown that there are 10,000 sites across

1 California where MTBE has polluted shallow
2 groundwater.

3 Q. Well, in examining the initial 236
4 underground tank storage sites--and is that your
5 data from 1998?

6 A. Yes.

7 Q. Yes. So, let's focus on that data from
8 '98.

9 You found that 78 percent had detectable
10 levels of MTBE; is that correct?

11 A. Yes.

12 Q. We can round it up to 80.

13 A. That's fine.

14 Q. Even though MTBE detects can vary from
15 region to region in California--well, you would
16 agree that MTBE detects can vary from region to
17 region in California; correct?

18 A. I don't know that we actually saw any in
19 looking at a cumulative distribution. I'm not so
20 sure that we saw any significant differences in
21 that distribution of maximum concentrations across

1152

1 regions of California. There's differences in the
2 numbers and densities of leaking tank sites in
3 different regions.

4 Q. In performing your analysis of those 236
5 leaking underground storage tanks from the 1998
6 data, you assumed that if 78 or if 80 percent of
7 the wells in one place contained MTBE, that 78 or
8 80 percent of the wells throughout California would
9 contain the MTBE; is that correct?

10 A. No. Let me explain that--let me first
11 preface this, that we are not talking about data
12 within my current expert reports. We are talking
13 about data from 1998. So, let's go back to data

14 that's currently in my expert report.

15 Q. Well, actually, I'm specifically asking
16 you about--and this is for purposes of
17 cross-examination. You, as an expert, and you with
18 your methodologies. It is an area that we are
19 entitled to look into with regard to methodology.

20 A. Sure.

21 Q. And as an expert and as somebody who has

1153

1 talked about her and her team's study of wells, the
2 Lawrence Livermore National Laboratory studies in
3 1998, that is the area that I'm asking to you focus
4 on.

5 A. You confuse the words "wells" with
6 polluted groundwater at leaking underground fuel
7 tanks.

8 Q. Okay.

9 A. So, let's me clarify. In 1998, we
10 predicted that there would be, based on a limited
11 dataset, we predicted that there would be 10,000
12 sites throughout California where tanks had leaked,
13 and that leaked gasoline had actually led to MTBE
14 contamination or pollution in the groundwater. So,
15 we said there is going to be 10,000 sites
16 throughout California at underground storage tanks
17 where MTBE has contaminated groundwater.

18 Q. Thank you.

19 A. In 2003, when we looked at the data in the
20 Geotracker database, we see that is proven exactly
21 true, that there are 10,000 sites in California

1154

1 that have polluted MTBE, have MTBE pollution in
2 shallow groundwater. And reevaluating that data,
3 we put the upper--an upper boundry on that of about
4 15,000, so we know there is 10,000. We expect
5 there are actually 15,000 sites throughout
6 California where MTBE has polluted shallow
7 groundwater.

8 Q. And just so I don't confuse the two terms,
9 when you talk about shallow groundwater, that is
10 not the same as talking about drinking water
11 sources; correct?

12 A. Right. I would like to--

13 Q. And that's--I appreciate that.

14 PRESIDENT VEEDER: Let the witness finish
15 the answer.

16 MS. CALLAWAY: I'm moving on to--fine.

17 THE WITNESS: This is detailed in my
18 report, my rejoinder report, on page 14, and I say
19 it's important to understand that when a
20 contaminant such as gasoline is released to the
21 subsurface, it often pollutes groundwater.

1155

1 Fortunately, however, this polluted groundwater is
2 not necessarily drinking water. The risk is that
3 the polluted body of groundwater will communicate
4 with and thereby contaminate water that is

5 extracted for use as drinking water.

6 So, the relevancy of all of these
7 contaminated shallow groundwater sites is that many
8 of those are in close proximity to drinking water
9 wells, and many of these drinking water wells have
10 not one but more than one of these in this close
11 proximity, and they are within the area where those
12 drinking water wells draw water from the
13 subsurface. So, increasing the likelihood that the
14 shallow water will communicate with the subsurface,
15 with the deeper drinking water aquifer.

16 BY MS. CALLAWAY:

17 Q. And It was 1998 that you first made the
18 prediction of the 10,000.

19 A. Correct.

20 Q. And again, it was the 10,000 leaking
21 underground storage tanks rather than 10,000

1156

1 drinking water sources; correct?

2 A. Correct. In the 1998 report, we say that
3 there are a limited number of impacts to drinking
4 water wells, but that those impacts were
5 significant to date, and that we expected them to
6 increase in the future.

7 Q. That doesn't change any of the data
8 regarding the actual MIBE detects you found in the
9 drinking water; is that correct?

10 A. In - -

11 Q. I'm sorry, the 1.37 percent of wells

12 having the detects; right?

13 A. Well, we know that there is, as I stated
14 in--before we began, in summary, that there have
15 been impacts to both public drinking waters and
16 private drinking water wells. The California
17 Department of Health Services database only looks
18 at a portion of the public drinking water wells.
19 We know there have been MTBE impacts to public
20 drinking water wells that are not in the California
21 database, and those are documented in my first

1157

1 expert report. If you want, I can turn to
2 those--that page.

3 I think that's page 51 of my original
4 report, expert report. We talked about South Lake
5 Tahoe that only nine of the 13 wells are in the DHS
6 database, even though 13 were impacted. The
7 Redwood Homes Trailer Park, where residents were
8 actually drinking contaminated MTBE water, that's
9 not in the DHS database. The Glennville Shopping
10 Center, again, where it was the only public supply
11 well in the town, and it was shut down. It's not
12 been replaced yet. That's not in the DHS database.
13 And then I go on to look at private drinking water
14 wells.

15 Of course, there is no testing of private
16 drinking water wells. They're not recollected by a
17 government agency more than you're supposed to
18 register that you're actually putting one in, but
19 there is no requirement for testing. There is

20 about 450,000 private wells in California, and I
21 document a handful of case studies where MTBE has

1158

1 contaminated private wells.

2 And, of course, these are more vulnerable
3 because they're typically screened in the shallow
4 groundwater, meaning the water they draw from is
5 the shallow groundwater.

6 Q. In the 10,000 wells estimate--

7 A. 10,000 leaking sites, polluted sites with
8 polluted groundwater.

9 Q. Is it okay if I call them LUSTs? I was
10 trying to not--

11 PRESIDENT VEEDER: It is okay.

12 BY MS. CALLAWAY:

13 Q. In the 10,000 LUSTs, you included all
14 manner of leaking tanks rather than just leaking
15 gasoline tanks; is that correct?

16 A. For the 10,000 that show detections of
17 pollution of MTBE pollution in groundwater, the
18 vast major--I did not look at which ones of those
19 tanks actually were labeled as holding gasoline or
20 not, because they have actually impacted
21 groundwater.

1159

1 Q. Are you--do you know a gentleman named
2 Dr. Graham Fogg?

3 A. Yes, I'm familiar with Dr. Fogg and his
4 work.

5 Q. Have you worked with Dr. Fogg before?

6 A. No, we had not worked together previously.
7 Of course, we knew each other and interacted
8 academically, but we didn't publish any papers
9 together.

10 Q. Have you read his expert report in this
11 case?

12 A. Yes, I have.

13 Q. So, you're aware that it is--that he
14 indicated in the UC--and you've read the UC report?

15 A. Yes, I have.

16 Q. You are aware that he indicated in the UC
17 report in evaluating your 1998 work that estimates
18 the 10,000 wells that it was his opinion that this
19 estimate was high because it included, and this is
20 what he says, all leaking tanks rather than just
21 leaking gasoline tanks. You're aware of his

1160

1 statement?

2 A. Yes, Dr. Fogg's group used more
3 conservative assumption in that they looked for
4 confirmation that the tank actually held gasoline
5 before they included it in their estimate. We
6 believe that the vast majority of these tanks
7 contained gasoline, and therefore made a larger
8 estimate, which proved correct.

9 So, he--so actually the amount of

10 groundwater pollution in California is worse than
11 was estimated by the UC report.

12 Q. And that's your opinion; correct?

13 A. Well, that's fact, because do you not
14 agree they estimated three to 4,000, something in
15 that range, sites that would have polluted
16 groundwater. We actually, in fact, know now from
17 testing results that have been submitted to the
18 State Water Board that there are actually 10,000 of
19 these sites that have been tested.

20 Q. Well, even though you knew at the time you
21 submitted your first expert report that there was

1161

1 criticism that you had estimated on the high end,
2 you didn't revise your figures.

3 A. Let's turn to that section of my report.

4 PRESIDENT VEEDER: Page 16? When you come
5 to the end of this, Mr. Callaway, we may have a
6 question.

7 MS. CALLAWAY: I'm at the end of that.

8 THE WITNESS: I think on page 29 of my
9 original expert report, Table 5--

10 PRESIDENT VEEDER: I'm sorry?

11 THE WITNESS: It's Page 29 of the original
12 report and Table 5. No, this is the December 3,
13 2000 expert report.

14 I'm sorry, I'm in the wrong one. Does
15 everybody have page 29?

16 PRESIDENT VEEDER: Yes.

17 THE WITNESS: So, on Table 5, you can see
Page 94

18 that all of these are leaking underground tank
19 sites, that if you look in the column on the far
20 right, we are looking at whether they have a
21 regulatory status of active or closed. We are

1162

1 ignoring that. We are looking at all leaking
2 underground storage tanks that have been tested for
3 MTBE.

4 We see that a little over
5 14,000--groundwater from about 14,000 of these
6 sites has actually been tested, and MTBE was
7 detected at 70 percent of those sites. And that
8 works out to just around 10,000.

9 So, there was no reason to revise our
10 number because in 1998, we estimated that there
11 would be 10,000 polluted groundwater sites, and in
12 2003, we looked at real data that showed that there
13 were, in fact, 10,000 sites where tanks had leaked
14 and MTBE had polluted groundwater.

15 And based on this newer, more
16 comprehensive dataset, we can actually raise the
17 estimate and put an upper boundary at about 15,000.
18 Does that help clarify?

19 BY MS. CALLAWAY:

20 Q. It does. Oh, I'm sorry.

21 ARBITRATOR ROWLEY: Are you finished this

1163

1 area?

2 MS. CALLAWAY: I think she was asking if
3 it clarifies--for me or for the Tribunal? It's
4 clarification for me.

5 BY MS. CALLAWAY:

6 Q. And again, this is using your
7 methodologies as the expert on the impact on
8 groundwater resources in California; correct?

9 A. Well, this isn't so much a methodology,
10 but a direct examination of the data. There is no
11 predictive value here. I'm looking to say in your
12 database at the State Water Board, how many of the
13 leaking tank sites that have been tested for MTBE
14 have found MTBE groundwater pollution in the
15 groundwater? And the answer is around 10,000.

16 Q. When you talk about groundwater pollution,
17 you're not looking at an MCL level; correct?

18 A. No. This is anything above one part per
19 billion.

20 Q. So, it's any detect; correct?

21 A. Yes, and that distribution of detects is

1164

1 shown in Table 6 on page 32 of this report.

2 Q. Well, in talking about in LUSTs and USTs
3 in underground storage tanks, you're aware that
4 there is--and maybe you're not, but I do think that
5 as an expert in groundwater resources you're aware
6 that California has legislation that is focused on
7 underground storage tank regulations; correct?

8 A. In my December 2001 report, Section 2.0
9 covers in great deal California's UST program and
10 the regulations that California has put in place
11 that are above and beyond the Federal regulations.

12 Q. Right.

13 And in your expert report, you discuss
14 your opinion that the operational maintenance,
15 installation, and design component issues with
16 underground storage tanks mean that they will
17 always leak; is that correct?

18 A. What I--in terms of leakage, that's best
19 summarized in my rejoinder report. If we turn to
20 page 10, I discuss two studies. And again, this is
21 not conjecture. It's actual field studies from the

1165

1 Santa Clara Valley Water District and from the
2 State Water Resources Control Board. These were
3 studies that were implemented in 1990 or published
4 in 1999. And these are actual real tests, so the
5 Water Board actually, in this study, they went out
6 and tested 55 facilities that had underground
7 storage tanks and found leakage at 80 percent of
8 those facilities in one or more of the UST systems
9 present at that active operating facility.

10 And over--let's see. On page 11, we say
11 in the middle paragraph it says, In the study,
12 80 percent of the operating service stations, 44 of
13 55 facilities, demonstrated leakage from at least
14 one UST system. At 40 percent of the operating
15 service stations, 22 of the 55 facilities, leakage

16 was detected from all UST systems at the facility.

17 So in all--so, in those cases, we find not
18 some, but a vast majority of the UST systems that
19 are meeting the more stringent California
20 regulations are continuing to release gasoline to
21 the subsurface.

1166

1 Q. Now that I understand that you're not a
2 health expert and you're not here to talk about
3 whether MTBE is a known carcinogen and, you know,
4 that properties of benzene or ethanol, you are
5 familiar, though, with the leaking underground
6 storage tanks and the effect on the groundwater
7 supply; correct?

8 A. Yes.

9 Q. And you would agree that whether there is
10 MTBE in gasoline or not, it's your opinion that
11 underground storage tanks are just going to
12 continue to leak; is that correct?

13 A. These studies demonstrate that even the
14 most compliant tanks are continuing to leak.

15 Q. So, if there is gasoline in those tanks,
16 it's going to continue to, in your terms, impact
17 the groundwater supply?

18 A. Well, that's the interesting part, isn't
19 it, because there's where you get the difference
20 between benzene and MTBE, because the studies show
21 that especially for small volume chronic releases

1 that benzene and the other gasoline hydrocarbons
2 are biodegraded over time and fairly quickly,
3 whereas MTBE was shown to be resistant to
4 biodegradation under these natural conditions, and
5 it continues.

6 So, in the case of small volume chronic
7 releases, benzene and the other hydrocarbons are
8 not much of an issue of concern.

9 Q. As a--two things here. You've talked
10 about benzene; correct?

11 A. Correct.

12 Q. And you talked about other hydrocarbons;
13 correct?

14 A. Yes, gasoline is a big mix.

15 Q. Is ethanol a hydrocarbon?

16 A. No. It's typically considered an alcohol.

17 Q. Okay. It's an ethanol, so it's an
18 alcohol.

19 A. Right. It's hydrocarbon based.

20 Q. I have a much more limited scientific
21 knowledge, clearly, but I was wondering if you've

1 looked at the benzene and I know you've looked at
2 the bioremediation, and we will talk about that,
3 but I would like to go again about health because
4 she's talking--

5 MS. CALLAWAY: When I asked about things

6 that are going to continue to leak, she said, well,
7 benzene is, it bioremediates more easily, but it's
8 a known carcinogen. Ethanol is a known carcinogen,
9 and I just to want make clear that whether benzene
10 bioremediates or not, it will still leak if
11 gasoline leaks.

12 BY MS. CALLAWAY:

13 Q. Right?

14 A. Yes, gasoline contains benzene. It will
15 be one of the components that's released.

16 Q. And if there is a gasoline with an ethanol
17 blend, you would agree that the ethanol would be
18 released by the leaking underground storage tank;
19 correct?

20 A. Absolutely.

21 Q. Now, going to bioremediation--

1169

1 PRESIDENT VEEDER: Just before you leave
2 this topic, we have some questions arising out of
3 the 10,000 sites reporting MTBE pollution. Could
4 we ask that question now?

5 MS. CALLAWAY: Absolutely. It's at the
6 Tribunal's--

7 PRESIDENT VEEDER: We're anxious not to
8 interrupt.

9 MS. CALLAWAY: Fine. And I may have
10 follow-up questions as well.

11 PRESIDENT VEEDER: Of course.

12 If you can turn, Dr. Happel, to your
13 second report at page 16, where you summarize your

14 views expressed in your first and the second report
15 at the top of the page in bold print, when you say
16 there by examining California's data, I find that
17 there are nearly 10,000 sites reporting MTBE
18 pollution in groundwater. And then you go on to
19 say, based on that data, you estimate that 10,000
20 to 15,000 LUST sites have polluted groundwater
21 sites throughout California.

1170

1 THE WITNESS: Yes.

2 PRESIDENT VEEDER: You were asked a
3 question as to whether you would ascertain whether
4 those 10,000 sites were in regard to LUSTs with
5 gasoline.

6 THE WITNESS: Right.

7 PRESIDENT VEEDER: I heard you say you'd
8 assumed that, but you hadn't ascertained that.

9 THE WITNESS: This analysis did not look
10 at whether those leaking tank sites were reported
11 to have contained gasoline. The reporting of that
12 is very variable. It comes off of, when someone
13 has released and they know they have a release at
14 your regular gas station in California, they have
15 to fill out what's called an unauthorized release
16 form. At that point there is a box on the form
17 that says what was in the tank, and they can check
18 off a substance. Many of the times that form--that
19 field isn't--isn't filled in.

20 And so, Dr. Fogg, he only used the data

21 where that form was checked to say gasoline. And

1171

1 that's a vast subset of the data.

2 PRESIDENT VEEDER: If the tank wasn't
3 gasoline, what would it be that would contain MTBE?

4 THE WITNESS: Well, it typically would be
5 gasoline. On the East Coast, there were some
6 studies showing that because of these trucks
7 carrying gasoline products, changing products, that
8 you could get some mixing of MTBE into other
9 products. But typically what's going to be
10 released is gasoline, and the form just hasn't been
11 filled out.

12 PRESIDENT VEEDER: Thank you very much.

13 ARBITRATOR ROWLEY: It's more or less the
14 same question, but as I understood your testimony
15 to be, that 10,000 were not tested as to whether
16 they contained gasoline, but you assumed the vast
17 majority was that they contained gasoline. Am I
18 right so far?

19 THE WITNESS: No. The groundwater, once a
20 release is occurred, somebody drills a well out at
21 the site and takes a water sample. They send that

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1 water sample to an analytical lab that runs it
2 through a gas chromatogram--GCMS, mass spectrometry,
3 and they look at what's in there, and what they

4 typically analyze for are the regulatory
5 contaminants of concern.

6 And so, what you will get back is fuel
7 oxygenate concentrations, BTEX--benzene, toluene,
8 ethyl benzene, xylene--and maybe TPH. That doesn't
9 always tell you whether this was--it certainly
10 doesn't tell you whether it was a low-grade
11 gasoline or a premium gasoline, and it doesn't
12 always tell you whether it was--you don't always
13 get the information as to whether it was diesel or
14 whether it was gasoline.

15 So, it's definitely what you do find out
16 is how much benzene, how much toluene, how much
17 ethyl benzene, how much xylene is in the gasoline,
18 but it doesn't necessarily, they are not collecting
19 and cataloging information on what was in the tank
20 at that point in time.

21 ARBITRATOR ROWLEY: Let me put it another

1173

1 way. If you find that 10,000 sites are reporting
2 MTBE pollution, why would I assume that that
3 pollution comes from gasoline containing MTBE?

4 THE WITNESS: These were all at leaking
5 underground storage tank sites, the vast majority
6 of those being gas stations or service stations.
7 And the vast majority of those containing would be
8 dealing in gasoline products.

9 What I'm simply saying is that in the
10 database we don't have a good qualifier there that
11 tells you that there was gasoline being served at

12 this station. We can assume that from common
13 knowledge, but there is not data there that says
14 that's been filled out by a state employee saying,
15 yes, there was gasoline in this tank.

16 PRESIDENT VEEDER: Ms. Callaway.

17 BY MS. CALLAWAY:

18 Q. Well, for the record, I'm glad to know
19 that when I couldn't ask or form it in a way that
20 could get a response, I'm glad that it took three
21 arbitration experts to reformulate my question, so

1174

1 thank you very much.

2 Dr. Happel, I did want to talk about
3 bioremediation a little. When you talk about
4 bioremediation and you talk about--you were talking
5 about benzene bioremediation versus MTBE
6 bioremediation, do you perform that research
7 yourself or do you rely on research familiar
8 performed by others?

9 A. Both. One of the publications that we
10 cite here was from my group at Livermore. That was
11 published in a very top line peer review journal.

12 Q. And when you say your group at Livermore,
13 did you engage in the actual research, or is it
14 something that--well, you engaged in the actual
15 research; is that correct?

16 A. I participated, and they were my
17 post-docs. I had a post-doc, and was later hired
18 as a scientist, so, yes, I had a direct

19 responsibility for that scientist in that research.

20 Q. So, you reviewed his or her research; is
21 that correct?

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1 A. Yes.

2 Q. I'm going to mention some names, and by
3 the way, this is I believe at Tab 10 in the
4 materials that we passed on the today, and,
5 Dr. Happel, this has materials for various other
6 people who are going to be--who are going to be
7 examined today.

8 I'm going to try to pronounce a couple of
9 these names. I think I can say Kate Scow with some
10 authority.

11 Do you know Kate Scow?

12 A. Yes.

13 Q. Do you know Douglas Mackay?

14 A. Yes.

15 Q. How about Krassimira Hristova?

16 A. These were graduate students on or
17 post-docs with Kate Scow, and I don't know them
18 personally.

19 Q. Binyam Gebreyesus, was he or she also a
20 post-doc?

21 A. Yes, that's my understanding.

1176

1 Q. The article, and I hope it's behind Tab 10

2 because we had some technical difficulties today,
3 this article called "Naturally Occurring Bacteria
4 Similar to the Methyl Tertiary-Butyl Ether
5 Degrading Strain PM1 are present in MTBE
6 Contaminated Groundwater. "

7 Have you reviewed this article before?

8 A. Yes, not in the context of--I mean, I
9 don't cite that article in my report, but yes, I
10 reviewed that article.

11 Q. Why is it that you don't cite this article
12 in your report? Is it because you don't agree with
13 its utility?

14 A. It's not relevant to this work because I
15 was looking--we were looking at whether MTBE was
16 degraded under natural conditions at the site.
17 This is aerobic degradation, this PM1 strain, and
18 so you would have to add oxygen to the subsurface
19 to have these type of degraders actually degrade
20 MTBE.

21 So this is a laboratory culture of a

1177

1 aerobic degrader. I'm not sure if people
2 understand the difference that in the laboratory
3 you could add oxygen and you can get MTBE to
4 biodegrade in aerobic conditions. Out in the field
5 the oxygen is rapidly depleted due to the
6 consumption of benzene and other very good tasting
7 hydrocarbons, and so the sites are generally
8 anaerobic.

9 And I think this is well--actually well

10 explained by Dr. Ward from the Methanex, and I
11 quote him in my rejoinder report.

12 Q. The difference between aerobic or
13 anaerobic biodegradation or the necessity in your
14 opinion of Dr. Ward's research for oxygen to be
15 introduced? Is that what you're referencing?

16 A. Right. It's on page 32 of my rejoinder
17 report. And this is a quote from Dr. Ward.
18 Gasoline plumes are generally anaerobic anoxic
19 because existing oxygen resources are rapidly
20 consumed in the biodegradation of most degradable
21 fractions of gasoline. For example, BTEX. Since

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1 MTBE does not degrade much, if at all, under
2 anaerobic and sorbs little to aquifer solids, it
3 could move with the flow of groundwater and hence
4 act in a conservative manner.

5 So, this is a very good paper, but it's a
6 paper that concerns bacteria grown under aerobic
7 conditions in the laboratory, whereas out in the
8 field we're looking at bacteria that are present in
9 the subsurface, not introduced to the subsurface,
10 and ones that--they would have to be able to
11 degrade MTBE under anaerobic conditions.

12 So, that's why even though this is a very
13 good piece of academic work, it is not entirely
14 relevant to this because those bacteria would not
15 be able to perform that function under intrinsic
16 natural conditions.

17 I hope that helps clarify things.

18 Q. It helps and raises a couple of points.

19 You will admit that, and you read Dr. Ward's

20 report, and I assume verbatim and I have no reason

21 to think you would interject any words, but he

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1 talks about MTBE being generally, generally not--I

2 could go through the record and read exactly what

3 Ward said, but he talked about how it doesn't

4 degrade much, if at all, anaerobically; correct?

5 A. Yes.

6 Q. He said it generally requires an aerobic

7 environment for biodegradation?

8 A. Right. I think it says does not degrade

9 much, if at all, under anaerobic conditions.

10 Q. The reason that I wanted to point to this

11 study, you were saying that it's a very good paper

12 and it's very useful. You don't think it's useful

13 for what you were looking at, but in the what I

14 would call the executive summary at the beginning,

15 the second sentence says, growing evidence

16 indicates that microbial communities indigenous to

17 groundwater can degrade MTBE under aerobic and

18 anaerobic conditions. And that's why I wanted to

19 point this out to you, to see if you had reviewed

20 it.

21 A. If you look at the other studies,

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1 everything is consistent. We don't have an
2 inconsistency here. Under aerobic conditions, if
3 you look at the study from my own laboratory, my
4 own group, which is on page 35 of the same
5 rejoinder report, you can see that if we take
6 sediments out of the subsurface, we put them in the
7 laboratory and we add lots of oxygen to make
8 conditions very nice for degrading MTBE, we can see
9 out of--we had seven different sites here, and at
10 three of those sites we got MTBE to biodegrade
11 under these nonnative conditions. But at four of
12 the sites we did not find these biodegraders.

13 We went further and did a molecular DNA
14 analysis to look at the types of microorganisms
15 that were present at the three sites where we did
16 find degradation, and we found a DNA structure that
17 related those microorganisms to the one that Kate
18 Scow isolated here.

19 So our conclusions from this study are
20 that these organisms are present at some sites in
21 the subsurface, and under--if you can add a lot of

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1 oxygen, you may be able to get biodegradation under
2 these circumstances, but that means you are going
3 to have to actively treat the subsurface, and we
4 recommend that you should screen the site first
5 because these biodegraders, even if you go to the
6 trouble of adding oxygen, aren't present at all
7 sites. It's clearly less than 50 percent here or

8 around 50 percent.

9 Q. But you were aware that--is it the PMI
10 strain that they found?

11 A. Yes.

12 Q. So, you were aware that they had found the
13 PMI strain anaerobically; correct?

14 A. No. The PMI strain is the aerobic
15 degrader.

16 Q. That is the one that they introduced.

17 You've never, and I don't want say never,
18 but within the confines of this case, and what you
19 were asked to do, you have not opined that it is
20 not possible to have bioremediation with MTBE
21 because as you just said, in your terms and I might

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1 dispute them, but you just said you have to give a
2 lot of oxygenate, but bioremediation is possible;
3 correct?

4 A. Well, let me clarify your statement.
5 Intrinsic bioremediation of MTBE where you do
6 nothing but just monitor, which is typically what's
7 done at a leaking tank site for benzene or other
8 hydrocarbons, obviously the most cost-effective
9 choice is to let it sit and degrade by itself.
10 That is clearly not an option for MTBE.

11 But what is an option for MTBE is if
12 you're willing to understand, do the site
13 characterization, understand the site, you have the
14 right sort of subsurface geology, and you are

15 willing to go to the expense to intervene to try
16 and add oxygen, in some cases that can be an
17 effective remediation strategy, but it's going to
18 cost time and energy to do that.

19 ARBITRATOR ROWLEY: Would it be right that
20 in some cases it's when those microorganisms are
21 present that--

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1 THE WITNESS: When microorganisms are
2 present, but also when you can actually physically
3 get the oxygen to the subsurface. For example,
4 some people put in biocurtains, so a curtain of
5 oxygen, but in this case you can only have your
6 contamination at a certain depth in order to put
7 that in. If you're too deep, you're out of luck,
8 and the contamination has to be flowing in a
9 certain direction. It can't be just spreading
10 everywhere because you can only--it's only--it's
11 very costly to do these things in the subsurface.

12 So, you're limited by those. There is
13 Shell Oil, for example, has been trying to grow
14 bugs, microorganisms similar to PMI outside in the
15 laboratory and then inject them in the subsurface,
16 but of course the problem there is distributing
17 them in the subsurface.

18 All of those are very expensive--and this
19 is not--I'm not testifying as an expert but as
20 general knowledge from working with the Water Board
21 and oil industry over the years, those are

1184

1 expensive methodologies, and not typical at leaking
2 tank sites.

3 BY MS. CALLAWAY:

4 Q. And again, whether as an expert or based
5 on your general knowledge, you also would have been
6 surprised at someone who says, you know, you've got
7 to introduce the PMI somehow, or those weren't your
8 exact words but when I said the presence of PMI,
9 you indicated to me that that is something that is
10 introduced in order to speed or in order to enable
11 biodegradation; correct?

12 A. There's two approaches to this. We will
13 separate them out as one is intrinsic or natural
14 approach, which you can take with benzene, but it's
15 not going to be effective with MTBE. It's largely
16 agreed upon.

17 Now, the second approach is an active
18 approach where you try and change something at the
19 site to try and encourage bioremediation, and they
20 call this augmented bioremediation. And augmenting
21 would be to add something to make the bugs that are

1185

1 already there grow better, and that would be adding
2 oxygen, and so what our study at Livermore said
3 would be 50 percent of the time you could find
4 those microbes in the subsurface. The other
5 50 percent you would actually not only have to

6 introduce oxygen, but you would have to introduce
7 the microorganism itself.

8 Q. Is PMI one of the microorganisms?

9 A. It's a family of microorganisms, yes.

10 Q. I recognize you didn't author this report,
11 and I also recognize that even when you read
12 scholarly journals, you can't remember everything
13 that you've read, but you would have been
14 surprised, as Dr. Scow's team was surprised, that
15 they found DNA sequences virtually identical to a
16 laboratory-isolated PMI genome present in the MTBE
17 contaminated groundwater. They were quite
18 surprised. I take it you would have been surprised
19 as well?

20 A. Let me repeat the results from our
21 Livermore study, and we are off in all these weeds

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1 over here about all these details about academic
2 studies because let's go back to the--I'm happy to
3 explain the detail, but at a high level, what we
4 are all I think in agreement on is that this is all
5 active remediation issues that we are talking about
6 right now.

7 So, from our study at Livermore, we found
8 that in the three cases where when we added oxygen
9 we were able to get biodegradation of MTBE to
10 occur, in those cases we went through a DNA
11 community analysis and looked at the microorganisms
12 that were enriched in those sediments and found DNA

13 sequence similar to PMI.

14 So, these microorganisms were in the
15 subsurface in three out of seven of the cases. In
16 the other four, that type of microorganism wasn't
17 present in the subsurface.

18 So, in three of the four cases, you could
19 just--if it was physically possible at those sites
20 to add oxygen, you may be able to get the MTBE to
21 biodegrade. In the other four cases, you would

1187

1 have to add oxygen plus a microorganism.

2 Again, I will just state that these are
3 academic types of applications. This is not
4 something that happens at leaking tank sites.

5 Q. Well, rather than belabor this point, Your
6 Honors, we will just submit this into evidence
7 because we do believe that it contradicts what Dr.
8 Happel is saying. And rather than go through the
9 entire time so that I could move on to a few other
10 questions.

11 PRESIDENT VEEDER: Before you tender it
12 into evidence, we have to invite the United States
13 to comment because this wasn't in the original
14 package of materials for this hearing.

15 What is the experience position of the
16 United States on this new document?

17 MR. LEGUM: If I understood Ms. Callaway
18 correctly, she's not offering this as impeachment
19 material, but rather as proof of a primary fact,
20 and the time for offering proof on those subjects

21 has long since passed.

1188

1 Dr. Happel's report has been in evidence
2 since December. They had an opportunity to submit
3 a rejoinder report, which they did. So we object.

4 PRESIDENT VEEDER: Is it to credibility or
5 is it evidence?

6 MS. CALLAWAY: Well, I do believe it is to
7 credibility, and that is not to mean that--I mean,
8 it's for the Tribunal to draw what it will. I
9 guess I would submit it on credibility because I
10 really don't want to sit. And this
11 cross-examination started out unnecessarily
12 contentious, and I really don't want to say, oh,
13 you know, and isn't it a fact. I'm happy to go
14 through this.

15 BY MS. CALLAWAY:

16 Q. And Dr. Happel, you would agree that a lot
17 of the work that--

18 PRESIDENT VEEDER: We're in the middle of
19 trying to make a ruling.

20 MS. CALLAWAY: I'll just do this to
21 credibility, and I know that you have this, and

1189

1 then I will consult later about whether to put it
2 into evidence, especially after we talk to Dr. Fogg
3 and Dr. Simeroth.

4 PRESIDENT VEEDER: We will admit the
5 documents on that basis due to your attack on the
6 credibility of this expert witness.

7 MS. CALLAWAY: Thank you.

8 BY MS. CALLAWAY:

9 Q. Now, staying in the area of
10 biodegradation, is ethanol more readily biodegraded
11 than benzene, to your knowledge?

12 A. Yes, and staying in the area of
13 biodegradation, I want to go over one thing, again,
14 that my publication from Lawrence Livermore is
15 completely consistent with Kate Scow's publication.
16 So, there is no problem with any inconsistency
17 between those two publications.

18 Q. Perhaps the publications are consistent,
19 but I think your testimony today was inconsistent
20 with this, and I will allow the--I'm happy to go
21 through and parse through it, but I don't think

1190

1 that the Tribunal is.

2 Going back to my question about ethanol,
3 you stated that ethanol is more readily biodegraded
4 than benzene?

5 A. Yes.

6 Q. And that means that if you introduce
7 benzene--I'm sorry, if you introduce ethanol into
8 gasoline, it will adversely impact the natural
9 attenuation of benzene; is that correct?

10 A. Yes.

11 Q. Okay. So, right now, you've testified
12 that benzene biodegrades more quickly than MTBE; is
13 that correct?

14 A. You said ethanol biodegrades more readily
15 than benzene.

16 Q. Earlier you said ethanol biodegrades more
17 readily than benzene; right?

18 A. Yes.

19 Q. And before that you talked about benzene
20 biodegrading more readily or attenuating more
21 readily than MTBE; correct?

1191

1 A. Yes.

2 Q. But by adding ethanol to gasoline, that
3 will slow or retard the attenuation somewhat of the
4 benzene; right?

5 A. Yes.

6 Q. Regardless of whether it's a known
7 carcinogen or not, okay.

8 A. In my rejoinder report--or, no, I guess my
9 original expert report in December 2003, on page
10 59, I say ethanol is preferentially degraded by
11 native microorganisms. Ethanol is easily degraded
12 by such organisms. They will metabolize at first
13 over other substances such as hydrocarbons.
14 Ethanol is not toxic to and is easily degraded by
15 indigenous aquifer organisms at concentrations
16 lower than 40,000 micrograms per liter.

17 Q. Is it significant that ethanol is not
18 toxic to those indigenous bi oorganisms?

19 A. Yes.

20 Q. Wouldn't you also agree that it is
21 significant that ethanol is toxic to human beings?

1192

1 A. I'm not commenting on the--I'm not
2 commenting on human health effects. I think we've
3 covered that.

4 Q. But you are a groundwater expert, and you
5 are commenting--you talked earlier about your
6 knowledge of--based on general knowledge and common
7 knowledge, and you've talked about the toxicity
8 here or the lack of toxicity to the indigenous
9 plants as being significant. But in looking at
10 groundwater impact and in making these reports, you
11 would agree that in looking at the groundwater
12 impact, it is also significant whether benzene or
13 ethanol would be toxic; correct?

14 PRESIDENT VEEDER: Just before that
15 question is answered, can you show us where that
16 arises from these two reports, that particular
17 question.

18 MS. CALLAWAY: On the toxicity?

19 PRESIDENT VEEDER: Yes.

20 MS. CALLAWAY: It's from the--I don't have
21 it in front of me. It's actually from the passage

1193

1 that Dr. Happel just read about ethanol not being

2 toxic to the indigenous--

3 PRESIDENT VEEDER: Let me help you. Page
4 59, ethanol is it not toxic to, that is easily
5 degraded by indigenous aquifer microorganisms at
6 certain concentrations. That's the sentence you're
7 attacking?

8 MS. CALLAWAY: Correct.

9 I'm not attacking it because as somebody
10 who does not have Ms. Happel's expertise, I cannot
11 disagree with that.

12 I was asking if she believed that that
13 was--that its lack of toxicity was significant, she
14 stated that she did, and I asked if she would also
15 agree that it is significant that ethanol is toxic
16 to human beings, and--

17 PRESIDENT VEEDER: That's my trouble with
18 the question. If you look at this text, that's not
19 what she's saying. She's talking about ethanol is
20 not toxic to indigenous aquifer microorganisms, not
21 to human beings.

1194

1 MS. CALLAWAY: Yes, Your Honor, President
2 Veeder. What I was hoping to do, and clearly I'm
3 not going to be able to, is to show that while she
4 believes that its lack of toxicity with regard to
5 bioorganisms that are indigenous in the groundwater
6 is relevant, she will not comment on its toxicity
7 to humans, and I know the argument will be, well,
8 she's looking at groundwater and its impact, and in

9 order to look at the impact, she needs to look at
10 the bioorganisms that are indigenous and its impact
11 on them.

12 But, you know, and it's frustration we all
13 face, it goes back to methodologies, and the
14 methodologies and the issue that you are asked to
15 look at. If you look at things in a vacuum, you
16 can come up with all sorts of conclusions, but it
17 gets a little sticky when you start looking at two
18 sides to the story.

19 But rather than testifying myself or
20 giving a closing argument, I will go back to my
21 questions.

1195

1 Dr. Happel, also with remediation, and
2 with your expertise on groundwater resources and
3 impact on them, are you familiar with areas in
4 California that have actually banned two-stroke
5 engines in use in waterways?

6 THE WITNESS: I know they have been banned
7 from a layperson's knowledge. I'm looking at
8 groundwater resources, the two-stroke engines are
9 not an issue in groundwater. That's a surface
10 water issue.

11 BY MS. CALLAWAY:

12 Q. But you are aware of the Lake Tahoe ban on
13 two-stroke engines? Are you not aware of that?

14 A. I'm aware of bans as a very general way as
15 a layperson, so I really don't think I should
16 comment on that here. I'm specifically an expert

17 on groundwater. There are other surface water
18 experts that you can talk to.

19 Q. Part of what informs your research is the
20 release of gasoline into groundwater sources; is
21 that correct?

1196

1 A. Yes.

2 Q. And you would agree that if less gasoline
3 is released into those groundwater sources, there
4 will be less contamination of any kind; is that
5 correct?

6 A. Yes.

7 Q. And you would agree that while lakes are
8 surface water or rivers are surface water, those
9 lakes and those rivers do in certain instances
10 supply some of the groundwater resources that then
11 become drinking water. There is just--you cannot
12 prevent the natural ebb and flow of the different
13 water surfaces commingling or communicating with
14 each other; isn't that correct?

15 A. Some of the surface waters do serve as
16 sinks. You can have surface water that will become
17 groundwater.

18 Q. So, you can.

19 And you state that you're familiar with
20 Lake Tahoe's ban on the two-stroke engine as a
21 layperson, but as somebody who follows the leakage

1 of gasoline into water, or I shouldn't say leakage,
2 the release of gasoline into water, you're familiar
3 with it as well; correct?

4 A. No, I'm going to go back to, I'm a
5 groundwater expert. My knowledge of specific bans
6 of which lakes have banned two-stroke engines and
7 which have not, I don't have knowledge on that, and
8 I don't think it would be right to speculate.

9 Q. Well, as somebody who, as a layperson and
10 not as an expert, but somebody who as a layperson
11 but who has expertise in bioremediation and in the
12 presence of release of gasoline into the
13 groundwater, were you aware or are you aware today
14 that the ban on two-stroke engines that was passed
15 in the Lake Tahoe basin, and that's not just the
16 lake, it's the basin where there is commingling
17 there can be commingling in the sinks, there was a
18 corresponding reduction--corresponding 90 percent
19 reduction in MTBE concentrations? Are you familiar
20 with that?

21 MR. PAWLAK: Excuse me, Mr. Veeder, I

1 would like to object to this question as outside of
2 the scope of the expert testimony, and the witness
3 has made it plain that she's not here to talk about
4 surface waters and that's what the question goes
5 to.

6 PRESIDENT VEEDER: That was bound to come,

7 Mr. Callaway.

8 MS. CALLAWAY: This is actually not about
9 surface waters only. This is about the entire Lake
10 Tahoe basin. And I know that Dr. Happel has stated
11 that she is familiar with this as a layperson, but
12 I also think that it is relevant that by banning
13 the two-stroke engine and having the 90 percent
14 decrease--

15 PRESIDENT VEEDER: Your point may be
16 absolutely valid, but the objection is how does
17 this arise from this expert witness's expert
18 reports?

19 MS. CALLAWAY: Dr. Happel has just
20 admitted that groundwater--

21 PRESIDENT VEEDER: From the reports.

1199

1 MS. CALLAWAY: She talks about the
2 reports, and she talks about remediation,
3 bioremediation and fixings leaking underground
4 storage tanks. She talks about how there are steps
5 can be taken to limit the release of MTBE or
6 biodegradation. This is another step that can be
7 taken that was not considered in her report, and I
8 know she's going to say, well, because it involves
9 primarily surface water--

10 PRESIDENT VEEDER: She's already said
11 that, and that's what she's going to say again if
12 you ask her. I'm absolutely sure, and she would be
13 right. Her report doesn't deal with surface water.
14 The nearest she gets to Lake Tahoe, if you pick

15 this up at page 52 of the first report where she
16 talks about the South Lake Tahoe area. Maybe you
17 could ask her a question about that.

18 MS. CALLAWAY: That wouldn't be any fun.
19 I'll just close. I understand.

20 What I was really looking at is her
21 familiarity with that, and as a scientist asking

1200

1 her to admit that by banning two-stroke engines
2 you're improving water quality. But if that is
3 beyond the scope--

4 PRESIDENT VEEDER: I don't think you need
5 to put that to an expert witness. That's in the
6 material we have already.

7 BY MS. CALLAWAY:

8 Q. I have a final question, Dr. Happel.

9 A. Sure.

10 Q. As a groundwater specialist, and as
11 somebody who has on behalf of the United States
12 studied the impact of MTBE on California's
13 groundwater supplies, can you explain for me how a
14 ban on MTBE will stop gasoline and the hydrocarbons
15 in it, including benzene, and the ethanol in that
16 gasoline from being released into the environment,
17 including groundwater?

18 A. Let me try to repeat the question.

19 Q. I will rephrase so that it's just more
20 succinct.

21 Can you tell me how a ban on MTBE will

1201

1 stop gasoline and the benzene and ethanol in that
2 gasoline from being released into groundwater?

3 A. You're asking will a ban on MTBE prevent
4 gasoline from being released from UST tanks?

5 Q. Gasoline and the benzene and the ethanol
6 in it.

7 A. Any constituent in gasoline.

8 Q. Right.

9 A. Because the gasoline is released.

10 Replacing any constituent in gasoline with
11 another constituent, changing the chemical
12 composition of gasoline has nothing to do with the
13 ability of the tank system or the underground
14 storage tank to increase or decrease releases.
15 They're just unrelated. The tank really doesn't
16 care what's stored in it.

17 Q. The tank is going to leak, anyway, in your
18 opinion; correct?

19 A. Yes, those types of releases, gasoline
20 releases, will occur regardless of to the majority
21 extent of the chemical composition.

1202

1 Q. So, banning MTBE doesn't stop gasoline
2 release into groundwater; is that correct?

3 A. Banning MTBE does not affect the ability
4 of the UST tank to prevent releases.

5 Q. And for purposes of your work on behalf of
6 the United States, and your extensive research in
7 this area, you were not asked to analyze the
8 release of ethanol from leaking underground storage
9 tanks to date; is that correct?

10 A. We do have some information about releases
11 of ethanol from underground storage tanks, and
12 those are covered in my report. We could go to
13 those details.

14 Q. But you weren't asked, say, from January
15 1st, 2003, to January 1st, 2004, to cover any
16 increase or decrease in the release of ethanol from
17 leaking underground storage tanks; correct? That's
18 not something you were asked to do; right?

19 A. Well, my analysis, we were using datasets,
20 we stayed with the original dataset that was in
21 2003. Always new analysis can be done, but at this

1203

1 point the dataset ended for the drinking water
2 wells in June of 2003.

3 Q. And this--

4 A. In December of 2003 for the leaking tank
5 sites.

6 Q. And you talked about you could stay with
7 the datasets, and as an expert witness and as a
8 scientist, the questions posed to you do affect
9 what your response is.

10 A. There were no questions posed to me. I'm
11 not clear what you mean by that.

12 Q. Well, for example, you weren't asked

13 to--your team was not asked to look at, say--your
14 team was not asked to compare--and I'm showing the
15 NRDC's, I think it's called the list of 23
16 colloquially or list of 25, you were not asked to
17 specifically look at these--and I know that you do
18 some analysis on things other than MTBE, but you
19 weren't asked to put an asterisk in your report and
20 say, by the way, to the Tribunal, MTBE is not
21 listed by the National Resource Defense Council as

1204

1 one of the 23 most troubling ingredients in
2 groundwater; right?

3 A. This is a really fascinating point. This
4 is actually presented in great detail in my report,
5 and I would like to turn there, because this is a
6 very important point.

7 Q. Right. The frequency is in there; right?

8 A. At page 40.

9 Q. Right.

10 A. If we look at--Methanex, apparently it was
11 in one of your briefs that you referred to a report
12 done by the National Resources Defense Council that
13 looked at data from the Department of Health
14 Services' public database over a one-year time
15 interval, and what I did was I can't vouch for the
16 methodology that the National Resources Defense
17 Council used, but since there was an interest in
18 this, I redid the dataset based on the current
19 Department of Health Services database as of

20 June 2003.

21 And what we are looking at in Table 6 is

1205

1 the percentage of public wells with detections
2 above MCL. And what you see is that MTBE ranks
3 ninth. When we are using the secondary MCL of five
4 parts per billion, which is the enforceable
5 standard in California, whereas benzene is 10, 11,
6 12, 13th, and this is out of the top 113 organic
7 chemicals in the database, and that's a really
8 pretty remarkable ranking for a chemical that was
9 only introduced in widespread use in California as
10 of 1992. We started using it in the wintertime
11 oxygen program here. Then in 1995, we started
12 using it statewide year round.

13 So, it's ranking ninth overall out of the
14 current database.

15 And interestingly enough, in Table 7, when
16 we look at the average concentrations of detections
17 in these public supply wells, we see MTBE is
18 ranking second.

19 And I did this by two different
20 methodologies, one where you look at the average of
21 the maximum detection per well, so you look at the

1206

1 maximum detection to the average among all wells,
2 or you look at the average for any well and then do

3 the average of the average, and here you're finding
4 that MTBE is ranking second in concentrations in
5 public wells, and again I would just like to say
6 that this is, you know, actually really not a
7 positive picture for MTBE, given the very recent
8 introduction into California's environment.

9 Q. You talk about the recent introduction,
10 but you would acknowledge that MTBE has been around
11 since the seventies; right?

12 A. It was introduced into gasoline at very
13 low levels and sporadic use as of 1979. It was
14 used primarily in premium gasoline grades, and the
15 percentages varied, but it was around 2 to
16 3 percent. And we have very spotty records about
17 how much was actually used in California from 1979
18 onwards. Really the good data that we can really
19 depend on starts in the early nineties, and there
20 we see vast quantities of MTBE being used in
21 California in response to the wintertime oxygenate

1207

1 program, and it's completely cyclic. You can see
2 it. There is no MTBE being consumed wintertime
3 programs not in place, or very little, and then the
4 MTBE usage jumps again in 1995, once the year-round
5 statewide regs went into effect.

6 So, I can't really vouch for the NRDC's
7 analysis for over that one-year time period, but if
8 you look at the DHS database in detail that I
9 presented here, you will find MTBE actually ranks
10 very significantly, ninth out of 65--I think I

11 looked at 113 organic chemicals that had been
12 sampled for in more than 5,000 wells, and 65 of
13 those had an MCL, so it ranked ninth in this test,
14 and then in terms of concentrations in these wells,
15 it was ranking second.

16 Q. And again, just, and I promise that I am
17 closing, going to the methodology, the methodology
18 you used was looking at the secondary MCL of five;
19 right?

20 A. Well, I actually note down below that in
21 the notation that starts on page 39, if you look at

1208

1 footnote 60, it says we use the lower value either
2 the primary second MCL because the secondary MCLs
3 are enforceable standards in California, meaning
4 that drinking water with concentrations above a
5 secondary MCL cannot be served in public water
6 systems.

7 And I go on to say there are 65 organic in
8 the DHS database where over 5,000 public drinking
9 water wells have been sampled one or more times and
10 have an MCL. Use of the primary MCL value of 13
11 PPB for MTBE would show that the percentage of
12 public drinking water wells with detections of MTBE
13 at or above the primary MCL is nearly equivalent to
14 benzene. By use of the primary MCL, MTBE would
15 rank 14th in this analysis.

16 Q. So, if your analysis was done with the
17 primary MCL, and I guess when you did the analysis

18 it was down to 14; right?

19 A. Right. So, it's still up in the, you
20 know, first, 10 to 15 chemicals out of this list.

21 Q. Right.

1209

1 A. It's not a very large difference.

2 Q. But--

3 PRESIDENT VEEDER: Ms. Callaway, how would
4 you define last as in last question?

5 MS. CALLAWAY: Last area.

6 PRESIDENT VEEDER: How many more questions
7 do you have? Because it's now 12:30.

8 MS. CALLAWAY: I'm just wrapping this up
9 on the methodology.

10 PRESIDENT VEEDER: We may have to break.

11 MS. CALLAWAY: Three minutes.

12 PRESIDENT VEEDER: There's also a
13 redirect. You say three more minutes?

14 MS. CALLAWAY: Three more minutes.

15 PRESIDENT VEEDER: And how long is the
16 redirect of the United States?

17 MR. LEGUM: There will be no redirect by
18 the United States.

19 PRESIDENT VEEDER: Let's proceed.

20 BY MS. CALLAWAY:

21 Q. But in changing-- this is really just about

1210

1 methodology, and you've acknowledged that by using
2 a different MCL, using primary versus secondary,
3 you say it's not a large difference, but there is a
4 difference when you use a different methodology;
5 correct?

6 A. I state here that very clearly that the
7 ranking is ninth if you use the secondary MCL,
8 which is an enforceable standard in California.
9 However, if you want to view this by the primary
10 standard, it ranks 14th.

11 Q. And that just means that when you use a
12 different methodology, you have a different result;
13 is that correct?

14 A. Yes, I got a result of ninth versus 14th.

15 MS. CALLAWAY: Thank you. Thank you very
16 much, and thank you again for coming.

17 PRESIDENT VEEDER: Thank you very much. I
18 think there are no questions from the United
19 States.

20 MR. PAWLAK: I confirm there is no
21 redirect.

1211

1 PRESIDENT VEEDER: Dr. Happel, we have
2 come to the end of your evidence. Thank you for
3 coming as a witness before us.

4 THE WITNESS: Thank you for your patience.

5 PRESIDENT VEEDER: Before we break, we
6 just want to revisit the program. At 2:30 we are
7 going to resume argument on the U.S. motion to
8 exclude certain Methanex material, and then we turn

9 to the first of the two remaining witnesses for
10 today.

11 MS. Callaway, will you be cross-examining
12 those witnesses?

13 MS. CALLAWAY: Yes.

14 PRESIDENT VEEDER: Without putting
15 pressure on you at all, can you give us some idea.

16 MS. CALLAWAY: I would say the same. The
17 same for Fogg and less for Simeroth, my boss tells
18 me.

19 PRESIDENT VEEDER: Are we on target to
20 finish today on that basis?

21 MS. CALLAWAY: Depending on how much time

1212

1 the United States takes, I certainly hope so. I
2 planned my weekend around that, so, yes, I hope so.

3 PRESIDENT VEEDER: We intend to break at
4 5:30 today. That's why we want to keep a close
5 watch on time.

6 MS. CALLAWAY: I will talk faster.

7 PRESIDENT VEEDER: No, we'd rather you
8 didn't. Or at least we know somebody who'd rather
9 you didn't, our shorthand writer. If you could
10 just review the overall timetable, and we will
11 revisit it at the end of the argument on the U.S.
12 motion.

13 MS. CALLAWAY: I would say--

14 PRESIDENT VEEDER: Don't do it now. We
15 will come back to you.

16 MS. CALLAWAY: Okay.
17 PRESIDENT VEEDER: We will break now. I
18 was wondering if we should break for the full two
19 hours, given that we have a rather small sandwich
20 each for lunch. Two hours? We are a little
21 concerned that we don't want to squeeze you,

1213

1 Ms. Callaway, if we could start maybe before 2:30
2 on the U.S. motion. Is that going to be possible?
3 Mr. Dugan is not here.

4 MS. CALLAWAY: That's fine for us because
5 I'm just ready to go with the witnesses. We can
6 start whenever the Tribunal asks to us start.

7 PRESIDENT VEEDER: United States, would
8 you be ready to address us before 2:30?

9 MR. LEGUM: I believe we prefer to start
10 at 2:30. There is quite a bit of material that
11 Methanex provided us to digest. So, we would
12 prefer to start at 2:30, although we will try to be
13 as brief as possible.

14 PRESIDENT VEEDER: Are you splitting
15 teams? Could we start with the next expert witness
16 at 2:00? Would that be possible?

17 MR. LEGUM: Sure, that's possible.

18 PRESIDENT VEEDER: You don't actually have
19 to start in the U.S. argument until late in the
20 afternoon. It's not time-specific. We're not
21 waiting for Mr. Vind as we were yesterday.

1 Ms. Callaway, if that's okay with you, we
2 will start the next expert witness at 2:00, and
3 then we will interpose the U.S. argument sometime
4 later in the afternoon.

5 MS. CALLAWAY: I will let Mr. Dugan know
6 that we are going to start with the expert at two,
7 and he will be back then.

8 PRESIDENT VEEDER: Let's break until 2:00.
9 Thank you.

10 (Whereupon, at 12:35 p.m., the hearing
11 was adjourned until 2:00 p.m., the same day.)

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21

1 AFTERNOON SESSION
2 PRESIDENT VEEDER: Let's resume, but
3 before we turn to the next witness, we have been
4 looking at the timetable again for this afternoon.
5 The priority is to hear the two remaining witnesses
6 for the day, and we really would like to know from

7 the parties whether it wouldn't be safer to deal
8 with the two witnesses and then turn to the U. S.
9 motion rather than have the U. S. motion interposed
10 between the two witnesses.

11 MR. LEGUM: That makes more sense to us,
12 Mr. President. Mr. Simeroth has a 7:00 flight
13 which if he can make, that would be great.

14 PRESIDENT VEEDER: If it's 7:00, what time
15 does he have to leave here?

16 MR. LEGUM: Given it's a light traffic
17 day, I would think 5:00, 5:30. And there is a
18 later flight, which is less convenient. But he can
19 take it if need be.

20 MS. CALLAWAY: I went through my questions
21 for this afternoon and cut substantially because of

1216

1 the health things, knowing there are no health
2 experts, but if I can know how much time the U. S.
3 thinks that they have on direct and then also how
4 much time the U. S. thinks they're going to need
5 later this afternoon, I can cut the
6 nonessential--although everything is essential, I
7 can cut the nonessential areas.

8 PRESIDENT VEEDER: Without putting
9 pressure on anybody, let's work through. On direct
10 for both witnesses?

11 MR. PAWLAK: Certainly hoping to keep it
12 to ten minutes or less, with this particular
13 witness and I can't speak for the other, but I

14 suspect it's will be about the same.

15 PRESIDENT VEEDER: So, 20 minutes or less.

16 And then redirect examination as well?

17 Ms. Callaway, over to you, you're doing

18 both witnesses. What is your best estimate?

19 MS. CALLAWAY: I would say 50 minutes with

20 Dr. Fogg and 35 with Dr. Simeroth.

21 PRESIDENT VEEDER: On that basis, we are

1217

1 bound to finish with the two witnesses before 5:30,

2 is that confirmed?

3 MS. CALLAWAY: I hope so.

4 MR. PAWLAK: Seems to be.

5 PRESIDENT VEEDER: Let's proceed.

6 Welcome, Dr. Fogg. Before you start your
7 testimony, we invite you to make the declaration in
8 the form of the text before you, and if you are
9 willing to do so, we invite you to make the
10 declaration now?

11 GRAHAM FOGG, RESONDENT/PARTY'S WITNESS, CALLED

12 THE WITNESS: I solemnly declare upon my
13 honor and conscience that my statement will be in
14 accordance with my sincere belief.

15 PRESIDENT VEEDER: Thank you.

16 Mr. Pawlak?

17 MR. PAWLAK: Thank you, Mr. President.

18 DIRECT EXAMINATION.

19 BY MR. PAWLAK:

20 Q. Dr. Fogg, good afternoon.

21 A. Good afternoon.

1218

1 Q. As you know, my name is David Pawlak, and
2 I am an attorney with the NAFTA Arbitration
3 Division at the Department of State, and I would
4 like to ask you a few questions about your reports
5 this afternoon.

6 Let's begin with the documents before you.
7 If you could please take the document dated
8 December 1 and labeled 13 JS tab D. Is this your
9 December expert report offered in this case?

10 A. Yes.

11 Q. Could you please turn to page 90 of this
12 document. Do you have it there?

13 A. Yes.

14 Q. Is that your signature at page 90?

15 A. Yes, it is.

16 Q. And what is the date of that--that you
17 have there below your signature?

18 A. December 1, 2003.

19 Q. Thank you.

20 Could you please take the other document
21 that is before you. This one is labeled 24 JS tab

1219

1 B. Could you turn to page two of this document.
2 Is that your signature?

3 A. Yes.

4 Q. And what is the date below your signature

5 on this report?

6 A. April 21, 2004.

7 Q. Could you please go to paragraph 2 on page
8 one of your rejoinder report, and there you
9 acknowledge an independent duty to the Tribunal
10 above and beyond any obligation you have to the
11 United States as the party that retained you in
12 this case; is that right?

13 A. That is correct.

14 Q. And are you here today to testify with
15 that independent duty in mind?

16 A. Yes.

17 Q. Turning over to page two of that same
18 rejoinder report, referring to the passage just
19 above your signature, can you reaffirm that the
20 contents of your December and rejoinder reports are
21 true and correct, to the best of your information,

1220

1 knowledge, and belief?

2 A. I so confirm.

3 Q. Thank you, Dr. Fogg.

4 I would like to move on to your
5 qualifications. Dr. Fogg, you are a professor of
6 hydrogeology at the University of California at
7 Davis; is that right?

8 A. That is right.

9 Q. Could you please describe for the Tribunal
10 your educational background, beginning with
11 college, please.

12 A. I received a Bachelor of Science in
13 hydrology from the University of New Hampshire, a
14 Master of Science in hydrology and water resources
15 from the University of Arizona, and a Ph.D. in
16 geology from the University of Texas at Austin.

17 Q. Dr. Fogg, your position at the University
18 of California at Davis is a tenured position; is
19 that right?

20 A. That is correct.

21 Q. And when is it that you received tenure?

1221

1 A. 1989.

2 Q. Could you highlight briefly for the
3 Tribunal what your areas of expertise are.

4 A. Groundwater hydrology, groundwater
5 modeling, contaminant transport in groundwater,
6 hydrogeology of groundwater basins, sustainability
7 of water quality in groundwater basins, subsurface
8 characterization of groundwater systems, and
9 groundwater-surface water interaction.

10 Q. Could you now refer to your December
11 report, please. I would like you to turn to the
12 very back. On the very last page, 120, and a few
13 pages before it are numbered five--they are
14 numbered one through, I believe, 11. Do you see
15 that?

16 A. Yes.

17 Q. And is this your resume or curriculum
18 vitae?

19 A. Yes.

20 Q. Referring to page five, is that where you
21 begin the list of your publications?

1222

1 A. Yes.

2 Q. Could you tell me roughly how many
3 publications you have in your areas of expertise
4 listed here on your resume?

5 A. There are about 70 peer-reviewed
6 publications or refereed publications.

7 Q. Thank you, Doctor.

8 Dr. Fogg, were you involved in the UC
9 report process?

10 A. Yes.

11 Q. And how were you involved in the UC report
12 process?

13 A. I evaluate the effects of MTBE on
14 California groundwater.

15 Q. And you are an author of one of the papers
16 that constituted part of the UC report?

17 A. Yes.

18 Q. When were the findings and conclusions of
19 the UC report issued?

20 A. We submitted our report in November of
21 1998. Might have been late in October.

1223

1 Q. Have you received any awards from the
2 Geological Society of America?

3 A. Yes. In 2002, the Geological Society of
4 America awarded me the Birdsall-Dreiss
5 distinguished lectureship.

6 Q. And what did that award entitle you to do?

7 A. I gave 56 lectures on groundwater and
8 groundwater contamination at about 45 different
9 universities and research institutions in North
10 America and China.

11 Q. Thank you. Dr. Fogg, I would like to turn
12 to the opinions and conclusions you present in the
13 reports that you offered in this case.

14 Could you please consider your rejoinder
15 report, that is for the record 24 JS tab B, and I
16 would like you to turn to page 3, and review page 3
17 through seven.

18 A. Okay.

19 Q. First of all, Dr. Fogg, is this the
20 executive summary of your rejoinder report?

21 A. Yes.

1224

1 Q. You have about a half dozen or so bold
2 text points on pages three through seven of your
3 executive summary, do you not?

4 A. Yes.

5 Q. Could you briefly highlight for the
6 Tribunal your conclusions that you have highlighted
7 here in bold in your rejoinder report?

8 A. Yes. Methanex and its experts continue to
9 ignore the water situation in California, the

10 shortage of water in general, the important role of
11 groundwater and how groundwater contamination puts
12 pressure on the use of any water management schemes
13 in the state. The properties of MTBE together with
14 its high volume of use in gasoline together with
15 the many potential leak sites from underground fuel
16 tanks makes it a very potent contaminant of
17 drinking water sources, especially groundwater.

18 Because the public supply wells are an end
19 point to the problem, and because the progression
20 of this contamination problem is a slow-moving
21 process that operates on the order of years to

1225

1 decades, multi-decades, the present-day MTBE
2 impacts are not an accurate measure of the ultimate
3 impacts of MTBE, because of this long time lag,
4 although the present-day impacts are significant
5 and noteworthy.

6 Enormous numbers of drinking water supply
7 wells in California are vulnerable to MTBE
8 contamination because of the co-location between
9 drinking water supply wells and leaking underground
10 fuel tanks. The data of MTBE contamination in
11 public supply wells and private wells and other
12 monitoring well data show that the plumes continue
13 to spread. Methanex and its experts, Drs. Ward and
14 Williams, have ignored the important issue of
15 private wells raised in my December report, which
16 indicated that there are at least 450,000 private
17 wells that are more vulnerable to contamination

18 than the deeper, bigger public supply wells, and we
19 noted in that December report a number of instances
20 of significant contamination and human exposure due
21 to drinking water from the private wells. The

1226

1 clean-up of groundwater contamination is difficult,
2 costly, and sometimes impossible and once a
3 contaminant plume progresses and continues to
4 progress in a subsurface, the probability of
5 successful clean-up diminishes with time.

6 And Methanex's evaluation of the UC report
7 contradicts the generally favorable evaluations
8 submitted by government and other agencies that
9 were invited to review the report, and in general,
10 Methanex took statements out of context,
11 misrepresented facts and data that were detailed in
12 the UC report.

13 There is one other time item I would like
14 to mention, regarding the fact that since the UC
15 report, and this is detailed in my rejoinder
16 report, which is 13 JS tab D--

17 Q. I believe that is your December report?

18 A. My December report, item or paragraph 20,
19 the recommendation of the UC report to phase out
20 MTBE over an interval of several years was
21 consistent with other findings and recommendations,

1227

1 including the EPA Blue Ribbon Panel on oxygenates
2 and gasoline in the Northeast states for
3 coordinated area use management as well as other
4 scientific bodies, such as the National Research
5 Council, who looked into the remediation and
6 biodegradation issues as well as the Government of
7 Denmark who, after the UC report, sometimes
8 afterwards, decided to either ban or tightly
9 regulate MTBE use in Denmark.

10 MR. PAWLAK: Thank you, Dr. Fogg.

11 Could you please describe the threat posed
12 to California groundwater from MTBE as of 1998 and
13 1999.

14 THE WITNESS: In 1998 and 1999, it was
15 obvious that we had thousands of potential
16 source--thousands of actual sources of MTBE
17 contamination to groundwater. We had ample
18 evidence that some of these plumes had already
19 reached some public supply wells, such as at South
20 Lake Tahoe and other parts of the Tahoe basin and
21 Santa Monica and--there was another one; I just

1228

1 can't think of it right now. There were several
2 instances of MTBE plumes moving much further than
3 benzene plumes and reaching supply wells. We also
4 knew at the time that this problem could play out
5 over a very long time frame, so we could be judging
6 from other past contamination problems in
7 groundwater that were not MTBE and not from leaking

8 fuel tanks, that the problem could easily get much
9 worse, so we deemed it a significant problem to pay
10 attention to.

11 BY MR. PAWLAK:

12 Q. Dr. Fogg, my final question, could you
13 please refer to paragraph seven on page two of your
14 rejoinder report, and, again, for the record, that
15 is 24 JS tab B. Referring to paragraph seven,
16 could you please tell me how your opinions and
17 findings presented in the UC report compare to your
18 conclusions that you set out in the expert reports
19 that you offer in this case.

20 A. The conclusions in my rejoinder report and
21 in the December expert report are fundamentally the

1229

1 same in terms of the threat that we perceive, that
2 MTBE poses to groundwater in California.

3 Q. Thank you, Dr. Fogg.

4 PRESIDENT VEEDER: Thank you.

5 Ms. Callaway?

6 MS. CALLAWAY: Thank you.

7 CROSS-EXAMINATION

8 BY MS. CALLAWAY:

9 Q. Good afternoon, Dr. Fogg.

10 A. Good afternoon.

11 Q. I know that we met each other briefly when
12 we were all admiring the Power Book, but I want to
13 introduce myself for the record. My name is
14 Claudia Callaway, and I am here on behalf of
15 Methanex Corporation.

16 First, I want to thank you for coming this
17 long distance to talk about your expert report, and
18 I would like to begin by talking about your
19 specific area of expertise. You are a
20 hydrogeologist; is that correct?

21 A. That is correct.

1230

1 Q. And is hydrogeology the study of the
2 hydrology of groundwater?

3 A. It is, yes, essentially the hydrology of
4 groundwater.

5 Q. And you teach courses on hydrology or
6 hydrogeology as well; is that correct?

7 A. Yes, hydrogeology and contaminant
8 transport.

9 Q. What is the area in which you were asked
10 to offer expert testimony in today?

11 A. The effects of MTBE on California
12 groundwater and the ways in which the MTBE problem
13 has evolved since 1998.

14 Q. And when you say the "effects of MTBE," is
15 that limited to the hydrogeological effects or the
16 way that--let me rephrase that, the way that MTBE
17 has impacted groundwater in the state of
18 California?

19 A. Yes.

20 Q. You are not here as an expert regarding
21 bioremediation; is that correct?

1 A. Well, bioremediation and remediation of
2 groundwater in general is part of hydrogeology. A
3 hydrogeologist is a person who can analyze and make
4 judgments on water quantity and quality, including
5 the clean-up of water. So, hydrogeologists these
6 days are trained to be able to recognize clean-up
7 technologies and viable technologies for dealing
8 with groundwater problems. Many contamination
9 sites, clean-up investigations, are headed by
10 hydrogeologists.

11 Q. At the University of California at Davis,
12 do you have colleagues who specifically look at
13 bioremediation of groundwater?

14 A. Yes.

15 Q. And do you have colleagues who
16 specifically study the attenuation of groundwater
17 contaminants?

18 A. Yes.

19 Q. Earlier you discussed your work on the
20 University of California's 1998 study regarding
21 MTBE; is that correct?

1 A. That is correct.

2 Q. According to the UC report, and if I may
3 ask you questions about the UC report, which is
4 discussed in his report--I just want to make sure,
5 how much of the--how much was allotted to the UC

6 study, how much-- and I mean how many dollars were
7 allotted to the UC study?

8 A. In terms of direct dollars or leveraged
9 dollars?

10 Q. Was it \$500,000 in cash that was given for
11 the study?

12 A. Yes. There was also a lot of leveraged
13 money.

14 Q. How much of the \$500,000 did your group
15 receive?

16 A. I don't recall exactly. It probably
17 wasn't much more than 60,000.

18 Q. Are you aware that there are criticisms of
19 the UC report for being underfunded?

20 A. Yes.

21 Q. In fact, in the public hearings on the

1233

1 report, one of your co-authors admitted that it
2 wasn't a very well funded study; isn't that
3 correct?

4 A. I don't know.

5 Q. I would like to direct you to Tab 3, the
6 transcript of proceedings on February 19, 1999.

7 MR. PAWLAK: Ms. Callaway, we have one of
8 these here. Do you have another set for us to look
9 at?

10 MS. CALLAWAY: I apologize if we only gave
11 you one set. They should have all been given out
12 this morning. It is the same set that we had out
13 this morning.

14 MR. PAWLAK: Did you give us more than the
15 one you gave to the witness?

16 MS. CALLAWAY: Yes. We have many more,
17 and we will recycle everything at the end of the
18 hearing.

19 THE WITNESS: I am not sure where to look
20 now. I am not even sure if I have the document in
21 front of me.

1234

1 BY MS. CALLAWAY:

2 Q. If you could go to Tab 3, at page 40,
3 which is actually 5 JS tab--well, that doesn't
4 matter. Page 40, which is page 38 of this
5 reproduction, in Tab 3. It was page 38 of 218, at
6 line 13.

7 PRESIDENT VEEDER: Seems to be a problem.
8 We're looking at Tab 3?

9 MS. CALLAWAY: Tab 3 of the materials you
10 were given today. Yes, sir.

11 PRESIDENT VEEDER: Can you read out the
12 first page of Tab 3 because I think we were given
13 something different. Transcript of proceedings
14 February 13, 1998?

15 MS. CALLAWAY: That is it.

16 PRESIDENT VEEDER: What page would you
17 like us to look at?

18 MS. CALLAWAY: If you go to the third page
19 of the tab, at the top on the right-hand side it
20 says page 38 of 218.

21

PRESIDENT VEEDER: Yes.

1235

1

BY MS. CALLAWAY:

2

Q. And on the left-hand side, Dr. Fogg, if

3

you would look at line 13, where Mr. Reuter ***

4

states this wasn't a very well funded study that we

5

were doing; is that correct?

6

A. Yes, I see that.

7

Q. So, you are well aware, you have already

8

testified, that there were criticisms of

9

underfunding of this study?

10

A. Yes, but Mr. Reuter *** was not speaking

11

for me.

12

Q. You are aware of the criticisms, though?

13

A. Yes, indeed.

14

Q. Now, aside from the funding concerns--

15

PRESIDENT VEEDER: Just before you leave

16

that, I'm sorry, since you're coming in, can we ask

17

you to explain what do you mean by "direct dollars"

18

and "leveraged dollars"?

19

THE WITNESS: Well, most of us that worked

20

on the UC report had ongoing research projects.

21

They were related or closely related to the MTBE

1236

1

project. For example, most of us, not including

2

Dr. *** Rueter, were participating in a research

3

center funded by NIEHS, National Institute of

4 Health Sciences, a Superfund research center, and
5 we shifted most of our Superfund research on the
6 MTBE problem.

7 There was also an EPA center for
8 ecological health research. I essentially funded
9 all of the work that I did at Tahoe, and that my
10 students did at Tahoe on this MTBE assessment, onto
11 that.

12 And also, I think a lot of people don't
13 realize, and Dr. *** Ruetter is also not included
14 in this category, but most of the faculty in my
15 college are fully funded--there is no summer
16 salary. So, our salaries are fully paid and
17 they're paid for us to do public service and public
18 outreach, basically, as part of the agricultural
19 and natural resources experiment station. So if
20 you count all of the centers in my agricultural
21 experiment station support dollars, it adds up to

1237

1 something considerably more than what it looks like
2 on paper.

3 PRESIDENT VEEDER: You mentioned a figure
4 of \$60,000. Were they direct dollars or leveraged
5 dollars or both?

6 THE WITNESS: The 60,000 thousand was
7 direct dollars.

8 BY MS. CALLAWAY:

9 Q. Going back to the UC study, were you aware
10 that the Senate Bill that authorized the study,
11 Senate Bill 521, directed a full comparative

12 analysis of oxygenates, not only MTBE, but
13 including other oxygenates?

14 A. Yes.

15 Q. And just a moment ago you referred to the
16 MTBE study. Did you mean that to be the UC study?

17 A. Yes.

18 Q. Now, despite the charge to the researchers
19 in SB 521, the team did not assess the risks and
20 benefits to human health and the environment of
21 other oxygenates, did they?

1238

1 A. There may have been other members of the
2 group who were able to look at the other
3 oxygenates. In my case we had wanted to look at
4 more of the other oxygenates, but there were little
5 data--there was so much data on MTBE, that
6 essentially that consumed most of the effort, and
7 partway through the study, it became evident that
8 none of the oxygenates would be needed by
9 California to meet air quality recommendations.
10 So, the need to study all the other oxygenates was
11 not as significant by that time because of that
12 finding.

13 Q. So, there was no full evaluation of the
14 other potential oxygenates; is that correct?

15 A. Well, for groundwater there was hardly any
16 data available on the other oxygenates that we
17 could find.

18 Q. And additional research wasn't performed

19 to get that data; is that correct?

20 A. We attempted to get data, and we did not
21 find data.

1239

1 Q. So, the answer is that you are aware that
2 only MTBE ended up being studied; is that correct?

3 A. That is not exactly what I said. We
4 considered the other compounds. There was a lack
5 of data, and partway through the study a lack of
6 need to use any oxygenate whatsoever, which
7 affected what we ended up looking at.

8 Q. But Senate Bill 521 wasn't rewritten--

9 A. No.

10 Q. --to change the charge; right?

11 A. That is right.

12 Q. And you didn't mean to in any way rewrite
13 Senate Bill 521; right?

14 A. No.

15 Q. Earlier when I was asking you about
16 hydrogeology and hydrology, you talked a little bit
17 about attenuation being part of what
18 hydrogeologists now specialize in; is that correct?

19 A. No. I said that is one of the many
20 specialties that hydrogeologists must consider when
21 they evaluate collectively the numerous processes

1240

1 that govern movement of substances in groundwater.

2 In essence, that is what I was trying to say.

3 Q. Then I think I just misinterpreted what
4 you were saying.

5 Turning to your expert reports in this
6 case, you did not perform your own research, lab
7 research, or in-situ research regarding
8 biodegradation; is that correct--biodegradation of
9 MTBE; is that correct?

10 A. Well, as part of the Superfund program,
11 one of my close collaborators is doing that. So it
12 is not part of my lab, but in my own department,
13 there is Dr. Scow working in her lab on these sorts
14 of things.

15 Q. I will ask you some questions about
16 Dr. Scow in a minute, but for purposes of your
17 expert report, you didn't do any--you, as the
18 expert hired by the United States, did not perform
19 any individual research on the biodegradation of
20 MTBE; is that correct?

21 A. If you are referring to specific

1241

1 laboratory or field studies--

2 Q. Both.

3 A. --that is correct. We did modeling
4 studies, but we have not done laboratory or field
5 studies of biodegradation.

6 Q. For purposes of your report in this case
7 on behalf the United States, you relied on reports
8 or on reading of analyses provided by Dr. Anne
9 Happel regarding biodegradation; is that correct?

10 A. No.

11 Q. What analyses did you rely on regarding
12 biodegradation?

13 A. The available literature on biodegradation
14 including the National Research Council
15 publications from roughly 1998, 2000, through 2003.
16 We combed every available piece of literature that
17 we could find.

18 Q. For your expert report in this case; is
19 that correct?

20 A. Yes, and the rejoinder report.

21 Q. So you weren't just relying on

1242

1 Dr. Happel's work; is that correct?

2 A. That is correct.

3 Q. Now, you had mentioned Dr. Scow a moment
4 ago. Is she within the University of California at
5 Davis science community?

6 A. She is in my department, which is the
7 Department of Land, Area, and Water Resources.

8 Q. Do you know what her specialization is
9 within the Department of Area, Land, and Water
10 Resources?

11 A. Soil microbiology. And she does research
12 primarily on biodegradation of organic compounds,
13 including MTBE.

14 Q. Did you consult with Dr. Scow in drafting
15 your report, your expert reports in this case?

16 A. Did I consult with her about

17 biodegradation? Every month essentially because we
18 are collaborating on projects and have been for
19 roughly 14 years.

20 Q. Turning to Tab 10 in the materials, and I
21 do want to be sure everyone has the same Tab 10, we

1243

1 have provided a copy of an article issued by
2 Dr. Scow, Douglas McKay, and Benyam Gebreyesus, and
3 my apologies to Mr. Gebreyesus. I am wondering if
4 you are familiar with that article.

5 A. Yes, I am.

6 Q. Did you take this article into
7 consideration when writing your expert reports in
8 this case?

9 A. Yes.

10 Q. Despite taking that article into
11 consideration, you, nonetheless, assume that the
12 biodegradation of--let me rephrase that because I
13 am dealing with some really tough words here. I
14 want to make sure I am using the right word.

15 Despite the conclusions set forth in
16 Dr. Scow's report, and, again, she is within your
17 laboratory, and I know that you consult with her,
18 as you said, on a monthly basis. She stated that
19 growing evidence indicates that microbial
20 communities indigenous to groundwater can degrade
21 MTBE under aerobic and anaerobic conclusions.

1244

1 I guess your report seems to disagree with
2 Dr. Scow's conclusion. Is there just a
3 disagreement among peers?

4 A. No, there is not a disagreement.

5 Q. You agree there is biodegradation under
6 aerobic and anaerobic conditions; right?

7 A. Under certain circumstances, yes, but the
8 statement is out of context.

9 Q. I certainly don't mean to offer anything
10 out of context. You agree that it is a good idea
11 to pursue the aerobic biodegradation of leaking
12 underground storage tank sites; correct?

13 A. Certainly, but in my report, I offer ample
14 evidence of the fact that that is not a panacea.
15 It is something that should be pursued, but it
16 doesn't make the problem go away.

17 Q. In fact, there are a number of things that
18 should be pursued to contain any contamination from
19 leaking underground storage tanks; right?

20 A. Yes.

21 Q. You would agree, and you just agreed, that

1245

1 biodegradation through--or aerobic biodegradation
2 should be one of the things that is pursued;
3 correct?

4 A. Yes, except perhaps on plumes that are
5 already too big for that to effectively work on.

6 Q. Is another thing that should be pursued
7 a--should the enforcement of California's

8 underground storage tank laws be stepped up, in
9 your mind?

10 A. Stepped up relative to what? More than it
11 is now?

12 Q. More than it is now, yes.

13 A. I am not here to testify on California's
14 leaking tank laws, so I really can't speak to that.

15 Q. Well, in speaking about your expertise on
16 groundwater--yes?

17 A. Yes.

18 Q. And surface water, yes?

19 A. A little bit on surface water, yes.

20 Q. You have only a little bit of expertise on
21 surface water?

1246

1 A. I am a hydrogeologist which is a
2 subsurface hydrologist.

3 Q. I guess you've listed your areas of
4 specialization as groundwater-surface water
5 interaction?

6 A. Yes.

7 Q. Well, I will come back to that as well.
8 But with regard to remediation of any MTBE
9 contamination, do you agree that we should replace
10 leaking underground storage tanks with new and
11 better underground storage tanks?

12 A. Again, I do not know how much better one
13 can do in terms of tank design than what is being
14 done now. I know as an investigator who has looked

15 at problems starting with nuclear waste isolation
16 in the 1970s and '80s, and regional contaminant
17 transport, that I know of no substance that has
18 been stored underground that is a liquid that
19 doesn't eventually leak.

20 And my position on the tanks is, I will
21 make it very clear, I think we can possibly improve

1247

1 the tanks. They will age. They will be installed
2 and operated by human beings who will make
3 mistakes, and we live in a tectonically active
4 state in California. The earthquakes will only
5 accelerate the aging of these devices and increase
6 the chance of leaks, so I have never viewed the
7 tanks as an end point to the solution to the
8 problem, although it can help.

9 Q. It can help though?

10 A. Certainly.

11 Q. You would also agree that a ban on MTBE
12 will not prevent tanks from leaking; right?

13 A. That is correct.

14 Q. And perhaps I have misread your report,
15 and I certainly did not mean to take this out of
16 context because I am struggling with the context
17 myself, but I thought that in your report you
18 stated that MTBE does not degrade in aerobic and
19 anaerobic conditions?

20 A. That is out of context.

21 Q. Okay. So, you acknowledge that MTBE does

1248

1 degrade in aerobic conditions?
2 A. No. That is not an accurate statement.
3 There are circumstances--the key thing here is, if
4 you want to be able to say that biodegradation,
5 intrinsic biodegradation, that is biodegradation
6 that would happen without you doing anything
7 specific at a leaking tank site to engineer the
8 process, often we like to say, like with benzene,
9 the problem will be significantly curtailed or
10 mitigated by ubiquitous biodegradation. What we
11 have said and what we have backed up with numerous
12 current articles from the biodegradation
13 literature, is that there is no evidence for making
14 the statement that biodegradation, either aerobic
15 or anaerobic without any engineered intervention at
16 leaking tank sites, is sufficient for us to be able
17 to do what we have done with benzene, which is to
18 say natural attenuation of benzene is going to
19 mitigate the problem in perhaps 80 to 90 percent of
20 the cases. That is a key point.
21 Now, the other issue here is engineered

1249

1 biodegradation, which is a whole other issue, and
2 that is what they are speaking to there. They are
3 not referring to ambient, intrinsic biodegradation
4 that would go on without anyone having to do
5 anything special at the site.

6 Q. But you support the notion--you support
7 activated attenuation whereby oxygen can be
8 introduced to the groundwater; correct?

9 A. Yes, in cases where it is feasible.

10 Q. And outside the laboratory, where
11 consumers receive water, you understand that people
12 are trying to solve problems with approaches like
13 oxygenation to speed up biodegradation, correct?

14 A. Yes. Doug McKay is down the hall from me
15 in my department. He is one of the authors of that
16 article.

17 Q. Going back a little bit to the UC study,
18 are you familiar with--let me ask you this: In
19 your view, did the EPA endorse the UC report on
20 MTBE?

21 A. I don't know if I would--I don't know if

1250

1 they officially endorsed it. They praised it.

2 Q. Isn't it true that the EPA also criticized
3 it?

4 A. I think they offered some criticism.

5 Q. I am going to hand you some materials that
6 consist of DeWitt MTBE Oxygenates and Fuels
7 Letters, and this goes directly to criticisms of
8 the UC report by the EPA.

9 PRESIDENT VEEDER: Ms. Callaway, do we
10 have these in our existing volumes?

11 MS. CALLAWAY: Yes, you do.

12 PRESIDENT VEEDER: If you could give us a

13 reference for it, it would be easy for us to find
14 it.

15 MS. CALLAWAY: Certainly.

16 PRESIDENT VEEDER: Ms. Callaway, these are
17 not the documents you used yesterday, are they?

18 MS. CALLAWAY: I believe that some are,
19 but there are different documents.

20 I will ask members of my team to find the
21 joint submission site for the March 11, 1999, and

1251

1 April 1, 1999, reports, which I believe should be
2 at the top of the stack you were given.

3 BY MS. CALLAWAY:

4 Q. In the March 11, '99, report, a letter
5 from Robert *** Perchasepee, who was Assistant
6 Administrator of the United States EPA, is
7 mentioned. Did you ever see the letter that
8 Mr. *** Perchasepee wrote to the California EPA
9 regarding the UC MTBE report?

10 A. I don't remember.

11 Q. Were you at all aware of the three primary
12 concerns about the conclusions of the UC report
13 that Mr. Perchasepee expressed in that letter?

14 A. I may have been at one time, but frankly I
15 don't remember the person or the letter.

16 Q. I fully understand you can't remember
17 something that was issued five years ago.

18 A. In reading of this paragraph, he is
19 referring to--he is criticizing the emissions
20 aspects of the report. So if that is what his

21 letter is confined to, that would be one reason

1252

1 that I would not have seen it.

2 Q. Because you are only--

3 PRESIDENT VEEDER: Just one moment because
4 we are concerned about the reference of the letter.
5 We understand that this DeWitt report is in file
6 11--so finding the reference. Is the letter in
7 evidence or is this the best evidence we have of
8 the letter?

9 MS. CALLAWAY: I would ask my colleagues
10 to find out if the actual EPA letter is in evidence
11 and get back to you on that.

12 PRESIDENT VEEDER: If you would help us
13 find the reference as quickly as possible.

14 MS. CALLAWAY: Absolutely. The reference
15 to the EPA's letter from Mr. *** Perchaseppee.

16 PRESIDENT VEEDER: And also the Dewitt
17 newsletter.

18 MS. CALLAWAY: Okay.

19 PRESIDENT VEEDER: But just one moment.
20 I'm sorry, Dr. Fogg. We have an objection from the
21 United States.

1253

1 MR. PAWLAK: I just want to object to this
2 line of questioning. If Ms. Callaway is going to
3 rely on a secondary source as to what the EPA

4 letter said and then ask our witness what he thinks
5 about that. That is not necessarily the content of
6 the letter. If she wants to ask him questions
7 about the letter, she can show him that letter.
8 She doesn't have it in evidence, then I think we
9 need to move on.

10 MS. CALLAWAY: If I have a need to ask
11 further questions, I will get the actual letter so
12 that Dr. Fogg can read it.

13 PRESIDENT VEEDER: Please do.

14 BY MS. CALLAWAY:

15 Q. Dr. Fogg, going back to the UC report
16 again, did you understand that the Governor was
17 charged with making a decision that there was an
18 environmental risk, a health risk, a health and
19 environmental risk or no risk at all in making a
20 decision regarding the use of MTBE?

21 A. The question is whether he had a choice

1254

1 between deciding it was a health risk, or a health
2 and environmental risk, or an environmental risk,
3 or no risk?

4 Q. Yes.

5 A. Are those the categories?

6 Q. Were you aware that that was the charge
7 given to him in issuing an order regarding MTBE?

8 A. Yes.

9 Q. And did you ever have an occasion to
10 review the Executive Order that Governor Davis

11 issued in March of 1999 regarding MTBE?

12 A. I don't believe I ever read the entire
13 document, no.

14 Q. So you weren't aware that the Governor in
15 the document stated that he made his decision based
16 on a finding that on balance, a significant risk to
17 California's environment--

18 MR. PAWLAK: I beg your pardon. I am
19 going to object to this as outside the scope of the
20 report authored by Dr. Fogg.

21 PRESIDENT VEEDER: Ms. Callaway, where are

1255

1 we going?

2 MS. CALLAWAY: Really to the fact that the
3 Governor did not find any health risk that the team
4 that he was on at UC only looked at MTBE and not
5 the other oxygenates--

6 PRESIDENT VEEDER: The latter you have put
7 to him. It is the former. Maybe you ought to
8 readdress the question because you don't have to
9 relate it to the Governor's Executive Order.

10 MS. CALLAWAY: Certainly.

11 BY MS. CALLAWAY:

12 Q. Well, you were one of the authors of the
13 UC study; is that correct?

14 A. Chapter four, yes.

15 Q. But it is part of the study?

16 A. Yes.

17 Q. You are just a co-author of one of the
18 chapters. You don't consider yourself a co-author

19 of the entire report?

20 A. I am a co-author of the entire report,

21 yes.

1256

1 Q. And you are aware, aren't you, that
2 Governor Davis relied in part on that report in
3 deciding what to do with MIBE?

4 A. Yes.

5 Q. So it would have been of interest to you
6 what the Governor did with respect to the report?

7 A. Yes.

8 Q. You didn't just look at environmental
9 issues, or did you, in your portion of the report?

10 A. In my portion of the report I looked at
11 environmental issues only.

12 Q. You didn't look at health issues only?

13 A. Not in chapter four.

14 Q. And you don't offer any opinions today
15 about MIBE as it impacts human health?

16 A. No. In my first--my first report I made a
17 comment on what I felt was a misrepresentation of
18 what was in the health effects parts of the
19 conclusions of the UC report, but I am not here to
20 testify as an expert on health effects of MIBE.

21 Q. So we should disregard anything you say

1257

1 about the health effects--

2 A. I haven't said anything.

3 Q. --in your report. You correct a
4 misstatement?

5 A. No. We can go to that, if you would like.

6 PRESIDENT VEEDER: Let's go to it because
7 I think we can get to the bottom of this very
8 quickly. Is it paragraph 137, page 63?

9 THE WITNESS: Page 63?

10 PRESIDENT VEEDER: Paragraph 137.

11 THE WITNESS: Yes, paragraph 137 states,
12 "Health effects associated with MTBE drinking water
13 exposures," and then it quotes Dr. Williams, that
14 the theoretical health risks associated with MTBE
15 drinking water exposures are likely to be
16 negligible, and the quote there is Williams, et
17 al., 2000, and Williams 2001, and then unquote, and
18 this is taken from Williams 2003 report, Section 13
19 C. Our response is, first, the full extent of
20 health risks from MTBE are unknown and a topic of
21 research. Second, CDHS and purveyors of drinking

1258

1 water in California are doing a good job of health
2 regulations and keeping MTBE contaminated water out
3 of the taps of consumers. They accomplish this
4 through considerable difficulty and expense, and it
5 goes on to describe what they do.

6 BY MS. CALLAWAY:

7 Q. But your clarification is not as an
8 expert?

9 A. No. It is clarifying what was an
10 interpretation of that section of the UC report.

11 Q. So it is as a lay scientist--I don't how
12 you can be an expert with regard to health
13 sometimes.

14 A. I can read what my colleagues wrote in the
15 report regarding health and put it in perspective
16 relative to what Dr. Williams said, and that is all
17 I was doing.

18 Q. But you are not saying you are not an
19 expert on health, but that you were at another
20 time?

21 A. I am not offering expert reports on health

1259

1 now or at any other time.

2 Q. Let me ask something that is well within
3 your expertise, with regard to water plume length
4 in groundwater. Are you aware of whether ethanol
5 is readily biodegraded?

6 A. It tends to be to be readily biodegraded.
7 That is my understanding.

8 Q. Is it also your understanding that ethanol
9 in gasoline will affect the natural attenuation of
10 BTEX and extend BTEX plumes?

11 A. Yes, I heard that.

12 Q. And that is your understanding of the
13 effect, yes?

14 A. Yes.

15 Q. I would like to ask you a couple of
16 questions about methodology as well. You have

17 mentioned a report by one of Methanex's experts,
18 Pamela Williams. Are you familiar with her
19 criticisms of the methodology that you used in your
20 report?

21 A. Yes.

1260

1 Q. And would you agree that the results that
2 you reached using the cumulative detect methodology
3 would be different if you had used the detect
4 frequency methodology?

5 A. The results in terms of my interpretation
6 of what is going on?

7 Q. Well, the results--there--a number of
8 things comprise your results. First there are
9 numbers, numbers of detections; right?

10 A. Yes.

11 Q. And using the cumulative detect method,
12 those detections accumulate from year to year;
13 right?

14 A. Yes.

15 Q. But using a detect frequency method, you
16 would analyze those detections based on a certain
17 amount of time and start anew with the next time
18 period; correct?

19 A. Yes.

20 Q. So if you use the detect frequency method
21 rather than the cumulative detect method, your

1 charts would look different, wouldn't they?

2 A. The charts would look different.

3 Q. But your conclusion that there is, and I
4 want to make sure I use the right language here,
5 your conclusion that there is, quote, widespread
6 and significant, unquote, detection frequency of
7 MTBE in groundwater would not change; is that
8 correct?

9 A. The widespread, as far as I know, is not
10 referring to public supply wells. The widespread
11 part refers at least in part to the sources, and,
12 yes, my conclusion about the significance of the
13 effects of MTBE. When I look at Dr. Williams's
14 expert reports, they are wholly consistent with
15 what I am saying about the spread of MTBE. You do
16 not get consistent detection frequencies from year
17 to year or from period to period without MTBE
18 continuing to be spread and to be discovered.

19 Q. The widespread and significant frequency
20 of detections that you describe, is that 50 percent
21 detection?

1 A. What are you referring to?

2 Q. If you go to your report, and you talk
3 about--and you look at your characterization of the
4 frequency of MTBE in groundwater as being
5 widespread and significant, in what percentage--

6 PRESIDENT VEEDER: Before you go to the

7 question, can you help us find the passage?

8 MS. CALLAWAY: Sure.

9 (Pause.)

10 BY MS. CALLAWAY:

11 Q. Sure. Going to page eight of
12 the--December 1, 2003, going to paragraph 23, and,
13 again, focusing on--I say again, but this is the
14 first time during this examination, focusing on the
15 data in 1998, in the second sentence you state,
16 quote, The scope of the threat posed by MTBE
17 contamination was significant. Widespread use of
18 MTBE. So I didn't--I misquoted what I had written
19 down, but do you feel that there is significant
20 MTBE contamination of California groundwater.

21 A. Yes.

1263

1 Q. And the number of--and you talked about
2 water supplies and water sources. What is the
3 difference between a supply well and a source well?

4 A. I didn't refer to source well. I was
5 referring to source of contamination.

6 Q. I apologize.

7 A. In--okay. It is illegal to contaminate
8 any groundwater that is potable today or possibly
9 going to be consumed in the future, and the source
10 statement refers to the thousands of leaking
11 underground fuel tank sources that technically
12 illegally contaminate groundwater that may
13 ultimately be consumed at that point or migrate to
14 existing wells.

15 Q. In your conclusion that 3 percent of--3
16 percent of the sources that you studied were
17 contaminated by MTBE, is that a correct statement
18 of your findings?

19 A. No. We estimated the number of public
20 supply wells that may have been contaminated using
21 inadequate data. We came up with a range of .3 to

1264

1 .12 percent of supply wells. That is wells serving
2 I believe it is 15 or more connections, that had
3 detections--

4 Q. It is .3 percent of--

5 A. If you are referring to the estimate--in
6 1998, the numbers of public supply wells that had
7 seen impacts from MTBE.

8 Q. My last area of questions, and this is the
9 last area, you stated that you--when you are
10 looking at groundwater--you are a hydrogeologist;
11 correct?

12 A. Yes.

13 Q. And you look at the groundwater supply of
14 California; correct?

15 A. Yes.

16 Q. And you have also analyzed surface water
17 in studying California's water supply; is that
18 correct?

19 A. I do research on the interaction of rivers
20 with groundwater in California.

21 Q. And a number of California's rivers are--I

1265

1 want to say, funded by lakes, but they receive--the
2 river flows from the lake; is that correct?

3 A. Well, perhaps from reservoirs, in the
4 Sierra Nevada and the foothills, yes.

5 Q. And the rivers like the Truckee River
6 receives some water from Lake Tahoe; correct?

7 A. Yes.

8 Q. And that is in the Sierra Nevada, just as
9 you said.

10 A. Yes.

11 Q. Are you familiar with the study that was
12 done after Lake Tahoe banned the use of two-stroke
13 engines on the lake?

14 A. In general, yes, I am familiar with the
15 results of that.

16 Q. And you would agree that by preventing the
17 use of a two-stroke engine, you are preventing the
18 release of gasoline from the two-stroke engine into
19 the lake?

20 A. You are taking the source of MTBE out of
21 the water body, yes.

1266

1 Q. Are you aware that there was a 90 percent
2 decrease in the Lake Tahoe basin of MTBE after the
3 ban on the two-stroke engines?

4 A. I don't recall the percentage, but I

5 wouldn't be surprised.

6 Q. So by limiting the release of the gasoline
7 into water or the surface water or the groundwater
8 sources, that also helped to limit the release of
9 the MTBE or ethanol or benzene.

10 A. Yes. The surface water processes and the
11 groundwater processes are totally different, but,
12 yes, in general, it is a good thing to prevent the
13 source of pollution, before it has a chance to
14 migrate into surface water or groundwater.

15 MS. CALLAWAY: I don't think I have any
16 more questions. I just want to go through my
17 notes.

18 (Pause.)

19 MS. CALLAWAY: That is it. Thank you very
20 much, Mr. Fogg.

21 PRESIDENT VEEDER: Any questions on

1267

1 redirect?

2 MR. PAWLAK: No redirect from the United
3 States.

4 PRESIDENT VEEDER: Ms. Callaway, will you
5 come back to that reference?

6 MS. CALLAWAY: Yes, I will, as soon as I
7 get the reference.

8 PRESIDENT VEEDER: But you don't need to
9 pursue it any more with Dr. Fogg?

10 MS. CALLAWAY: No.

11 PRESIDENT VEEDER: Dr. Fogg, we come to
12 the end of your testimony. We thank you for coming

13 today.

14 We will take five minutes while we get the
15 next witness.

16 (Brief recess.)

17 DEAN SIMEROTH, RESPONDENT/PARTY'S WITNESS, CALLED

18 PRESIDENT VEEDER: Let's resume. We

19 welcome Mr. Simeroth as our next witness.

20 Mr. Simeroth, we invite you to make the

21 declaration that is in the text before you.

1268

1 MR. LEGUM The witness declaration?

2 THE WITNESS: I solemnly declare that upon
3 my honor and conscience I will speak the truth, the
4 whole truth, and nothing but the truth.

5 PRESIDENT VEEDER: Ms. Menaker.

6 DIRECT EXAMINATION

7 BY MS. MENAKER:

8 Q. Good afternoon, Mr. Simeroth. We've met
9 before. For the record, I am Andrea Menaker. I am
10 an attorney with the State Department. And I am
11 going to ask you a few questions related to the
12 statements that you have put in in this
13 arbitration.

14 If you could take a look at your first
15 statement which is dated December 3, 2003, please.
16 You attested that the statements you made in that
17 statement were correct. Can you please take as
18 much time as you need and look through that
19 statement and tell me if, to the best of your

20 knowledge, those statements are still correct.

21 (Pause.)

1269

1 A. To the best of my knowledge, these
2 statements are still correct.

3 Q. Thank you. Can you take a look at your
4 second statement which is dated April 21, 2004,
5 please.

6 You also attested that the statements made
7 in that statement are correct. Can you please do
8 the same thing, and let me know whether, to the
9 best of your knowledge, the statements made therein
10 are still correct?

11 A. To the best of my knowledge, the
12 statements in the second one are also true.

13 Q. Thank you.

14 How long have you been with the California
15 Air Resources Board?

16 A. I joined the Air Resources Board in
17 January 1969. Shortly thereafter I took a
18 three-year military leave of absence and been with
19 the Air Resources Board continuously since January
20 1972.

21 Q. And what is your position with the

1270

1 California Air Resources Board?

2 A. I am an Air Resources Supervisor. I am a

3 Branch Chief in the Stationary Sources Division.

4 Q. And what are your responsibilities in that
5 position?

6 A. I am responsible for the development of
7 technical recommendations on our motor vehicle fuel
8 regs, regulations, as they pertain to air pollution
9 or air emissions. Also provide technical advice to
10 local air pollution control districts in terms of
11 oil and gas production and refining of products.
12 Also responsible for alternative motor vehicle fuel
13 specifications as they impact air pollution.

14 Q. Can you very briefly summarize the
15 principal conclusions in your witness statements.

16 A. Basically the statements indicate that the
17 basic reformulated gasoline with ethanol will
18 provide the same benefits as Phase II reformulated
19 gasoline with MTBE, or Phase II reformulated
20 gasoline.

21 Q. And on what did you base your conclusions?

1271

1 A. In developing the recommendations, staff
2 working for me undertook an exhaustive review of
3 the information available at that time, to make
4 recommendations to preserve the benefits of the
5 program as state law required us to do. Since that
6 time we have continued to review available
7 information.

8 MS. MENAKER: Thank you.

9 PRESIDENT VEEDER: Thank you, Ms. Menaker.

10 Ms. Callaway?

11 MS. CALLAWAY: I would like to introduce
12 two of my colleagues. That is Matthew Dunne and
13 this is Sabrina Rose Smith, and we did not spend
14 the money to get name tags for them. But before
15 Mr. Dunne left for the afternoon, I wanted to be
16 sure they were recognized.

17 PRESIDENT VEEDER: Hello to both of you
18 and thank you.

19 CROSS- EXAMINATION

20 BY MS. CALLAWAY:

21 Q. Good afternoon. Is it Mr. Simeroth or

1272

1 Dr. Simeroth?

2 A. Mr. Simeroth.

3 Q. Good afternoon, Mr. Simeroth. Thank you
4 very much for traveling to Washington today to
5 testify in this matter.

6 My name is Claudia Callaway, and I
7 represent Methanex in their action against the
8 United States.

9 You have been with the California Air
10 Resources Board since 1969, off and on; is that
11 correct?

12 A. Or continuously since January 1972.

13 Q. And since 1987, you have been the head of
14 the Criteria Pollutants Branch there; is that
15 correct?

16 A. That is correct.

17 Q. One of your responsibilities is to manage

18 the program that evaluates the performance of the
19 California reformulated gasoline. Do you call it
20 CarFG?

21 A. We refer to it as reformulated gas.

1273

1 Q. So you are aware that as a fuel oxygenate,
2 MTBE provided California with a number of air
3 quality benefits; is that correct?

4 A. Well, no. What we would say is
5 reformulated gasoline provided California with a
6 number of air quality benefits. Oxygen content of
7 the gasoline was one of eight specifications that
8 resulted in those benefits.

9 Q. Well, drawing your attention to benefits
10 of MTBE in gasoline, I would like to go over your
11 first witness statement which, for the record, is
12 found at 12 A JS tab H--it is actually 13 A. I've
13 been told that it's actually 13 A. I note that you
14 have it in front of you; is that correct?

15 A. That is correct.

16 Q. Now, under the Phase II reformulated gas
17 standards--can I call that the Phase II standards?

18 A. Certainly.

19 Q. Under the Phase II standards, MTBE was the
20 oxygenate of choice for complying with the Phase II
21 standards; is that correct?

1274

1 A. It was the oxygenate of choice by the
2 refiners for complying with the standards.

3 Q. Right. And you would agree that the Phase
4 II program was very effective in reducing harmful
5 emissions of oxides of nitrogen and hydrocarbons
6 and other air pollutants; is that correct?

7 A. That is correct.

8 Q. In fact, it is your testimony that in 1996
9 alone the Phase II program using MTBE as the
10 oxygenate of choice reduced emissions of
11 hydrocarbons by 17 percent; is that correct?

12 A. Well, reformulated gasoline resulted in
13 those emission reductions, not MTBE.

14 Q. And MTBE was the oxygenate of choice at
15 that time; is that correct?

16 A. At that time MTBE was the oxygenate of
17 choice.

18 Q. And while MTBE was the oxygenate of choice
19 in 1996, the Phase II program reduced emissions of
20 hydrocarbons by 17 percent; correct?

21 A. That is correct.

1275

1 Q. And it reduced the emissions of oxides of
2 nitrogen by 11 percent; correct?

3 A. That is correct.

4 Q. And during that same time period, in 1996,
5 when MTBE was the oxygenate of choice, carbon
6 monoxide emissions were reduced by 11 percent; is
7 that correct?

8 A. That is correct.

9 Q. And during this same time period, sulfur
10 oxides were reduced by 80 percent; is that correct?

11 A. That is correct.

12 Q. And MTBE has an additional benefit in that
13 it dilutes sulfur, the sulfur content of regular
14 gasoline by 11 percent; correct?

15 A. The refiners, if they use MTBE at 11
16 percent by volume, that would result in dilution of
17 the sulphur content of the gasoline by 11 percent.

18 Q. And that is because MTBE doesn't contain
19 sulfur; right?

20 A. Basically MTBE does not contain sulfur,
21 correct.

1276

1 Q. And MTBE does not contain benzene; is that
2 correct?

3 A. That is correct as well.

4 Q. And MTBE does not contain aromatic
5 hydrocarbons; is that correct?

6 A. That is correct.

7 Q. And that is why when you add it to
8 gasoline at 11 percent by volume, you get the 11
9 percent reduction in sulfur, benzene, and aromatic
10 hydrocarbon content; correct?

11 A. No. What you get is the dilution of those
12 constituents in gasoline by 11 percent.

13 Q. Thank you.

14 In your witness statement you noted that
15 MTBE reduces evaporative emissions of gasoline; is

16 that correct?

17 A. Again, the reformulated gasoline resulted
18 in the benefits of the program MTBE, to the
19 extent it is diluting out the gasoline, the
20 resulting mixture will have less evaporative
21 emissions of benzene.

1277

1 Q. Now, the use of MTBE does not increase the
2 Reid vapor pressure of gasoline; correct?

3 A. Well, the use of MTBE depends upon the--it
4 has an RVP blending value of about eight. The
5 performance standard for reformulated gasoline was
6 seven. So, there has to be a minor adjustment in
7 the constituents of reformulated gasoline to
8 accommodate MTBE and avoid an impact on evaporative
9 emissions.

10 Q. And you would agree then that MTBE does
11 not contribute to evaporative emissions by
12 increasing gasoline's tendency to evaporate; right?

13 A. Again, depends on what the MTBE is being
14 blended into. It does have a blending value for
15 impacting volatility slightly higher than our
16 standard.

17 Q. Let's talk about fuel grade ethanol. We
18 discussed MTBE and the reduction of benzene and
19 sulfur content in gasoline when MTBE is added at 11
20 percent; correct?

21 A. That is correct.

1 Q. But ethanol contains almost twice as much
2 oxygen as MTBE; is that correct?

3 A. Ethanol has about--approximately twice the
4 oxygen content as MTBE.

5 Q. And ethanol, fuel grade ethanol added to
6 gasoline does not reduce benzene and sulfur content
7 of gasoline, does it?

8 A. I am a little bit unclear on the question.

9 Q. I will rephrase--well, I will ask you
10 directly about the effect of the ethanol. The
11 typical percentage by volume of ethanol added to
12 gasoline is only 5.7 percent; correct?

13 A. That represents approximately 2 percent
14 oxygen. The refiners have elected to stay with the
15 2 percent oxygen requirement, so it is 5.7 percent
16 ethanol, plus or minus a little bit.

17 Q. And so whereas 11 percent MTBE is put in,
18 it is 5.7 percent of ethanol put in when you are
19 putting in an oxygenate; is that correct?

20 A. That is correct, for the 2 percent oxygen
21 standard.

1 Q. So, using the 2 percent oxygen standard,
2 the dilution benefit that you get with MTBE is
3 decreased when you use ethanol; correct?

4 A. That is correct.

5 Q. And that means that 5.--what I think is
6 math that I can perform, taking 11 and subtracting

7 5.7 and I get 5.3 percent, and using that number,
8 that means that there is 5.3 percent more sulfur,
9 5.3 percent more benzene, and 5.3 percent more
10 aromatic hydrocarbons in California gasoline with
11 ethanol than with MTBE; correct?

12 A. No. That is not correct. We have
13 specifications for each of those properties of the
14 gasoline. They all have to be met independently of
15 the oxygenate you are using, or not using. Our
16 regulation does not require the use of oxygenates.
17 The blending or dilution effects you are
18 mentioning, may make it easier for a refiner to
19 comply or not comply, but it doesn't bring it into
20 compliance. They still have to meet fully all of
21 the specifications.

1280

1 Q. You admit or you--I don't mean to use the
2 term admit--you state in your witness statements
3 that including ethanol in gasoline increases
4 evaporative emissions though; correct?

5 A. Putting ethanol in gasoline results in a
6 phenomenon that the resulting mixture has a higher
7 volatility than either of the two components by
8 themselves. The reformulated gasoline has a
9 standard for volatility that has to be met whether
10 it is MTBE or ethanol.

11 Q. Well, the way that the Air Resources Board
12 managed to maintain MTBE's emissions reduction,
13 even though ethanol increased emissions, was to

14 make some accommodations for ethanol, in the new
15 Phase III reformulated gasoline regs; correct?

16 A. No, that is not really correct. The
17 ethanol could have been used in the Phase II
18 reformulated gasoline and would have had the same
19 emission performances as MTBE. It is the oxygen
20 content that affects the exhaust emissions and the
21 volatility standards that affects the evaporative

1281

1 emissions. We made adjustments to the various
2 standards to facilitate the use of ethanol to allow
3 refiners to make--refine the same amount of fuel
4 per barrel of crude process when they are tailoring
5 the ethanol or tailoring their product to be used
6 with ethanol as opposed to tailoring their product
7 to be used with MTBE.

8 Q. Well, with regard to adjustments that were
9 made for the use of ethanol, in your first witness
10 statement you told the Tribunal that California
11 established a maximum oxygen content in gasoline
12 because California wanted to avoid, quote,
13 increases in oxides of nitrogen emissions that were
14 projected to result from higher oxygen levels;
15 right?

16 PRESIDENT VEEDER: Before you answer, can
17 you help us identify this document?

18 MS. CALLAWAY: Yes. It is in the first
19 witness statement and--California wanted to avoid
20 increases in oxide of nitrogen emissions that were
21 projected to result from higher oxygen levels

1282

1 emissions. That is found at paragraph seven.

2 THE WITNESS: That was in our wintertime
3 oxygen program where we were not adjusting other
4 properties of gasoline to reflect the oxygen
5 content. It is not part of our reformulated
6 gasoline program.

7 BY MS. CALLAWAY:

8 Q. Okay. So, in Phase II--in the Phase II
9 regulations, the maximum oxygen content was between
10 1.8 and 2.2 percent; right?

11 A. No, that's not correct. The flat limit
12 was 1.8 to 2.2--

13 Q. And there was a flexible cap of 2.7;
14 correct?

15 A. Well, the cap's not flexible. It is what
16 the refiners could blend up to if they adjusted
17 other properties of the gasoline to reflect the
18 higher concentrations of oxygen.

19 Q. So under Phase II regulations, it was the
20 Air Resources Board's understanding that the
21 maximum oxygen content of the reformulated gasoline

1283

1 would be 2.7 percent?

2 A. We selected 2.7 percent because at the
3 time the models being developed in 1994, that is
4 where we felt the data allowed us to accurately

5 define the envelope for oxygen content for
6 gasoline.

7 Q. But under what I will call the Phase III
8 reformulated gasoline regulations that--the
9 California reformulated gasoline III regulations,
10 the ARB actually increased the oxygen content from
11 a maximum of 2.7 percent to a maximum of 3.7
12 percent; is that correct?

13 A. What actually happened was in 1998, before
14 we adopted the Phase III requirements, because of
15 new data being available and ability to improve the
16 model, we increased the 2.7 maximum to 3.5 percent.
17 In Phase III, we had been requested by refiners to
18 further adjust the maximum oxygen content from 3.5
19 to 3.7 to allow them to actually blend a 10 percent
20 ethanol content. The two standards--oxygen is a
21 weight percent and the ethanol is a volume percent.

1284

1 Because gasoline has different densities by batch
2 and by time of the year, refiners stated they
3 couldn't maintain a 10 percent oxygen--ethanol
4 blend, excuse me, not oxygen blend, with a cap of
5 3.5 percent oxygen content on the gasoline. They
6 needed more flexibility in the oxygen content.
7 When we did Phase III, we made that a final
8 adjustment.

9 Q. And that was necessary because ethanol
10 contains more oxygen than MTBE; correct?

11 A. No--let me try. MTBE is approved by the

12 U. S. EPA to go up to a certain level, volume
13 percent of gasoline, that represented 2.7 percent
14 oxygen content. It is also why most of the test
15 programs back in the early 1990s were ran at that
16 oxygen content. Ethanol, because it has higher
17 oxygen to hydrocarbon ratio, at the same, at 11
18 percent--ethanol at 10 percent by volume, normally
19 contributes 3.5 percent oxygen. MTBE at 11 percent
20 by volume nominally contributes 2 percent oxygen by
21 volume. There is not--the cause and effect is not

1285

1 really there, if I am answering the question you
2 asked. I may have forgotten the question.

3 Q. I think you did answer the question, and
4 we disagree here apparently. Is it your testimony
5 then that the increase in the oxygen cap to 3.7 was
6 not done in part to accommodate the addition of
7 ethanol?

8 A. The reason for doing that was to
9 accommodate the ability of the refiners to blend
10 ethanol at 10 percent.

11 Q. And it would not have been necessary if
12 MTBE were used to be at 3.7; correct?

13 A. MTBE under U. S. EPA requirements cannot be
14 used at that high a level.

15 Q. And it was--so, correct.

16 Now, you were confident that oxides of
17 nitrogen emissions would not increase because you
18 made other accommodations for ethanol, mostly
19 because you knew that ethanol actually increases

20 evaporative emissions; right?

21 A. Well, you have mixed two things together.

1286

1 Do you want the oxides and nitrogens or the

2 evaporative emissions answered?

3 Q. How about the evaporative emissions?

4 A. We didn't make any changes to the

5 standard. The basic standard for MTBE in gasoline

6 was 7.0 pounds per square inch--Reid vapor

7 pressure. That standard applies whether it is MTBE

8 or ethanol.

9 In fact, when we went to Phase III

10 reformulated gasoline, for anyone using the

11 evaporative part of the predictive model, they had

12 to blend and meet a requirement of 6.9 pounds per

13 square inch which is more stringent than 7.0.

14 Q. The evaporative emissions increase the

15 potential for forming ozone; correct?

16 A. If you have an increase in any emissions

17 of hydrocarbons, it increases the potential.

18 Q. If we go to paragraph 38 of your first

19 witness statement and that is on page 10, you note

20 that the ozone-forming potential of ethanol

21 oxygenated gasoline is 17 percent higher than MTBE

1287

1 oxygenated gasoline; correct?

2 A. If you are referring to paragraph 38,

3 which I think you said--

4 Q. Yes, and going forward--

5 A. That was a test program ran to determine
6 if ethanol should be provided a one pound per
7 square inch waiver in the Reid vapor pressure
8 standards. The test program resulted us in denying
9 that waiver because it would increase evaporative
10 emissions. That meant that gasoline containing the
11 ethanol had to meet the same standards as any other
12 reformulated gasoline.

13 Q. Well, going to Reid vapor pressure levels,
14 ethanol increases the RVP of gasoline; correct?

15 A. If you do not adjust other properties of
16 the gasoline, putting the ethanol in will result in
17 a violation of our standards. As I mentioned
18 earlier, if you just simply mix ethanol and
19 gasoline together, the resulting mixture has a
20 higher volatility than the two components by
21 themselves, and that is one of the reasons why

1288

1 refiners find it difficult to use ethanol. To be
2 able to use it, they have to adjust or actually
3 remove like components to accommodate the ethanol
4 to make it compliant with Reid vapor pressure
5 standards, our volatility standards.

6 Q. You had to change the RVP standards by
7 increasing it for the wintertime by one pound per
8 square inch and reducing it in the summertime by
9 one pound per square inch; right?

10 A. No. The Reid vapor standards for the
11 summertime are the Air Resources Board standards.

12 Q. And that stays constant then?

13 A. Well, the ozone season is what it should
14 be rather than summertime, since it is eight months
15 out of the year, and even in California the summer
16 is not eight months. And so we set that
17 standard for--what we wanted to do was control
18 emissions during the ozone season when violations
19 of the ozone standard would occur. That standard
20 is constant throughout that season. We do not
21 regulate the volatility of gasoline in the

1289

1 wintertime. The Division of Measurements and
2 Standards and other state agency regulates it in
3 the wintertime for vehicle performance issues. The
4 Division of Measurement and Standards made an
5 adjustment in their wintertime standards to allow
6 gasoline containing ethanol a one pound per square
7 inch increase and still comply with their
8 standards. They did that with concurrence from the
9 American Society of Testing Materials, and their
10 adjustments for the wintertime as well.

11 Q. Well, in accommodating the use of ethanol
12 in reformulated gasoline, California also increased
13 the flat limit, the averaging and the cap limits of
14 T 50 and T 90 in the phase--or in the
15 reoxygenated--reformulated gasoline regulations;
16 correct?

17 A. We made adjustments to those four

18 standards that you mentioned for the distillation
19 distribution. The reason was that the MTBE very
20 favorably impacted the 50 percent distillation
21 temperature which allowed refiners to produce more

1290

1 volume than they could have otherwise in complying
2 with that standard. We made the adjustment to the
3 standards to allow refiners to produce the same
4 volume of gasoline at the refineries. Then we
5 reduced the sulfur content to offset the impacts on
6 hydrocarbon emissions from that adjustment. We
7 also reduced the sulfur content because we found
8 that the newer technology catalysts were more
9 sensitive to sulfur than we originally thought.

10 Q. Another change that was necessitated by
11 substituting ethanol for MTBE was a reduction in
12 the allowable limit of benzene; isn't that correct?

13 A. We made that change to reduce the public's
14 exposure to benzene which has been identified as a
15 carcinogen, human carcinogen. It wasn't directly
16 to reflect ethanol's characteristics. Use of
17 ethanol would still have had to meet the same toxic
18 emission standards as use of MTBE, but since we
19 were updating the standards, we went ahead and
20 adjusted the benzene as well.

21 Q. You would agree that an increase in

1291

1 hydrocarbon emissions is inevitable in ethanol
2 blended reformulated gas as compared to MTBE
3 reformulated gas; correct?

4 A. I am not sure in what sense you mean by
5 inevitable.

6 Q. You would agree that it is a scientific
7 fact that when compared to a gasoline that blended
8 with MTBE, gasoline that is blended with ethanol:
9 Has an increase in hydrocarbon emissions?

10 A. I am not sure in what sense. It depends
11 on which oxygenate you are using, and those
12 specifications are designed to preserve the
13 benefits.

14 Q. If you had not decreased the allowable
15 limit of benzene, there would have been an increase
16 in the benzene emissions when you compared ethanol
17 reformulated gasoline to MTBE reformulated
18 gasoline?

19 A. No. The reformulated gasoline is
20 regardless of which oxygenate you use, but it had
21 to meet the same requirements for toxic emissions.

1292

1 There are two parts to the benzene. One is simply
2 the gasoline content of benzene. The second part
3 is that reformulated gasolines have to preserve the
4 overall toxic characteristics of the gasolines for
5 both evap and exhaust. So, if you had more benzene
6 coming up because you are using ethanol, you have
7 to do something else to offset that.

8 Q. Well, what we argue is an accommodation.

9 I guess we will disagree on that.

10 And something that I would call in
11 counting down on accommodations, something I would
12 call the fifth accommodation was California
13 reducing the sulfur limits under the Phase III
14 program from 40 parts per million by weight to 20
15 parts per million by weight. That was done to
16 offset the sulphur content of ethanol; correct?

17 A. No, that is not correct.

18 MS. MENAKER: I apologize for interrupting
19 you, but do you have copies of this document?

20 MS. CALLAWAY: Yes. It is behind Tab 14.

21 MS. MENAKER: What is this document?

1293

1 MS. CALLAWAY: It's just an
2 illustrative--rather than writing it down on the
3 ELMO, I just typed it up.

4 PRESIDENT VEEDER: Just pausing, you
5 haven't referred the witness to it yet, have you?

6 MS. CALLAWAY: No. I am referring--I'm
7 just pointing it instead of using a Power Point and
8 clicking, one, two, three, four, five, it is just
9 summarizing what I am asking Mr. Simeroth about.

10 PRESIDENT VEEDER: We were looking for it.

11 MS. CALLAWAY: I apologize.

12 PRESIDENT VEEDER: It's Tab 14. Just to
13 make it clear, this is your document, Ms. Callaway?

14 MS. CALLAWAY: Yes. This is my wholly
15 created document from his witness statement.

16 BY MS. CALLAWAY:

17 Q. Now, the Air Resources Board stated in
18 1999 that the reason it reduced the sulphur limit
19 was because, quote, Setting a lower sulfur level,
20 will allow consideration of other specification
21 changes which, if done alone, could reduce the

1294

1 benefits of California RFG.

2 A. That is correct. If we made other
3 adjustments without countering those adjustments,
4 you could have a negative impact.

5 Q. And one of the differences between a
6 finished fuel grade ethanol and the kind of ethanol
7 that you can drink is that fuel grade ethanol
8 contains sulphur at concentrations between two and
9 eight parts per million; right?

10 A. Fuel grade ethanol would contain sulfur
11 concentrations depending upon what you put into the
12 ethanol to denature it. If you put in a denaturant
13 that has very low sulfur, you would have virtually
14 no sulfur in it. If you put in a denaturant that
15 has very high sulfur, it would have the parts per
16 million that you mentioned.

17 Q. The parts of sulfur hopefully keeps people
18 from consuming the fuel grade ethanol, but it also
19 increases the sulfur content of the gasoline to
20 which the ethanol is added; correct?

21 A. The addition of sulfur is inadvertent. It

1 is part of the denaturant that you are putting in.
2 It is the diesel fuel or gasoline is what they
3 commonly use to denature ethanol so people don't
4 drink it. It is the gasoline and diesel fuel that
5 causes people not to drink it, not the sulfur
6 content. You could have zero sulfur content
7 gasoline and people still wouldn't want to drink
8 the ethanol.

9 Q. But MTBE doesn't have any sulfur; right?

10 A. To my knowledge, there is virtually no
11 sulfur in MTBE.

12 Q. And even though you've lowered the sulfur
13 in MTBE, you will actually have the same amount of
14 sulfur as before with MTBE because ethanol does
15 contain sulfur; is that correct?

16 A. That is not correct. They still have to
17 meet the standards whether the ethanol contains
18 sulfur or not. We set the specifications for the
19 content, not only sulfur but other properties of
20 denatured ethanol so all of the refiners know what
21 they are getting and be able to plan their

1 production of gasoline around and still comply with
2 the requirements. The requirements apply to the
3 finished product, not to the separate components of
4 the product.

5 Q. Now, would you agree that although ethanol

6 blended gasoline meets the RVP standards, the Reid
7 vapor pressure standards--I know you know what that
8 is, I am just reminding myself that I do--would you
9 agree that although ethanol blended gasoline meets
10 the RVP standard, a mixture of non-ethanol blended
11 gasoline of the same RVP would result in greater
12 evaporative emissions by a phenomenon known as
13 commingling?

14 A. Commingling is a term of art that has been
15 developed to apply to mixing gasoline with ethanol,
16 gasoline without ethanol. The resulting mixture
17 has a higher vapor pressure or volatility than the
18 two individually because in effect you are mixing
19 ethanol now with gasoline that has not been
20 adjusted to meet it. That is one of the reasons
21 why we adjusted the Reid vapor pressure standards

1297

1 from 7.0 to 6.9, was to offset that commingling
2 effect. We did an extensive field study which was
3 peer-reviewed by the University of California to
4 confirm that that would be an adequate adjustment
5 and preserve the requirements of the program in
6 terms of the commingling effect. We were aware of
7 that at the time.

8 Q. In fact, these adjustments had to be made
9 to preserve the benefits of the program because of
10 the greater environmental impact that ethanol had
11 over MTBE on the air quality; correct?

12 A. Again, it is not ethanol or MTBE that has
13 the effects on air quality. It is the eight

14 specifications, one of which is oxygen content.
15 Ethanol has the unfortunate problem that it has an
16 effect on the volatility of the gasoline. You have
17 to make adjustments, when you are refining the
18 gasoline, to accommodate for that effect to be able
19 to use ethanol. It is more difficult to use.

20 Q. It is that accommodation that the ARB was
21 talking about in its initial statement of reasons

1298

1 in '99, when it said that setting a lower sulfur
2 limit would allow other specification changes that
3 if they were made alone would reduce the benefits
4 of the California RFG program; right?

5 A. Again, that is basically correct. You
6 can't change one thing about taking into account
7 its impact when you make the change. Sulfur is
8 about the only thing that when you reduce sulfur,
9 you reduce emissions of all parameters from
10 gasoline, at least in terms of exhaust emissions.

11 Q. Now, in your expert report, your first
12 expert report, and I only have three questions
13 left, in your expert report, you acknowledge that
14 MTBE and its use in gasoline did have some
15 favorable effects on air quality; is that correct?

16 A. I think what we acknowledged was that MTBE
17 is a blending component in gasoline and results
18 in--let me try this again. I'm sorry. MTBE's
19 characteristics is why refiners chose it as the
20 oxygenate of choice. It does not significantly

21 impact the Reid vapor pressure, the front-end

1299

1 volatility of gasoline, it doesn't contain the
2 components you mentioned earlier, it has a good
3 octane value, and it probably most significantly
4 impacts the 50 percent distillation temperature,
5 which are all good things.

6 Q. Those are all good things, right, as you
7 say. So, although you say in your witness
8 statement that ethanol will not harm California's
9 air quality, you say this based on the new
10 regulations, including accommodations to ethanol;
11 correct?

12 A. I would have made the same statement based
13 upon refiners having to comply with the Phase II
14 reformulated gasoline requirements. Those Phase II
15 requirements did not specify MTBE. They allowed
16 any oxygenate that would be approved for use in
17 gasoline to be used, and preserve the same
18 environmental benefits. We made the accommodations
19 in the Phase III reformulated gasoline to address
20 refiners' needs and be able to supply the state
21 adequately of gasoline, and use the remaining

1300

1 oxygenate, which is ethanol.

2 Q. You would agree, though, Mr. Simeroth,
3 that if you had just added ethanol to gasoline

4 without changing these rules, ethanol would
5 increase evaporative emissions of benzene, increase
6 sulfur content in gasoline, increase oxides of
7 nitrogen emissions, increase the tendency of
8 gasoline to evaporate, and result in greater smog
9 potential; correct?

10 A. Under our Phase II reformulated gasoline
11 specifications, what you said could not happen.
12 The refiners had to meet all of those requirements
13 independent of the oxygenate of choice. That is
14 why in our regulations, until Phase III came along,
15 you didn't see MTBE or ethanol mentioned in the
16 regulations. They both had to meet the same
17 performance standards under the model. Now, we
18 have improved the model with time as we got more
19 information, and those improvements probably would
20 have occurred without the ban of MTBE.

21 PRESIDENT VEEDER: When you began your

1301

1 answer, and you said what you thought did not
2 happen, you referred to regulations. I am not sure
3 the transcript caught what you said. Could you
4 repeat that first part of your answer?

5 THE WITNESS: The Phase II reformulated
6 gasoline regulations require that the final
7 gasoline meet a Reid vapor pressure, the oxygen
8 content, the sulphur content, aromatics content,
9 the benzene content, the 50 and 90 percent
10 distillation temperatures and olefin and total
11 aromatics content. It also requires that the

12 resulting blend preserve the toxics benefit of the
13 program. So, something's happening to--

14 PRESIDENT VEEDER: I think you answered
15 more than I needed, but you were referring to the
16 Phase II regulations.

17 THE WITNESS: That is correct.

18 BY MS. CALLAWAY:

19 Q. And these changes that are illustrated on
20 my own chart, those changes allowed ethanol's
21 addition to gasoline to meet those requirements you

1302

1 were talking about; is that correct?

2 MS. MENAKER: Excuse me. I don't think
3 Mr. Simeroth has ever agreed with what is put
4 forward on this chart, so could you please rephrase
5 the question, if you don't mind?

6 BY MS. CALLAWAY:

7 Q. Sure. Well, raising the allowable oxygen
8 content in Phase III, increasing the winter Reid
9 vapor pressure by one pound per square inch,
10 increasing the flat, averaging and cap limits of
11 T 50 and T 90 in Phase III, reducing the allowable
12 limits of benzene, and reducing the sulfur limits
13 in the RFG from 40 parts per million to 20 parts
14 per million, all of these things allow the gasoline
15 that is blended with ethanol to meet the same
16 standards that the gasoline that was blended with
17 MTBE was able to meet without these changes;
18 correct?

19 A. Generally speaking, that is not correct.
20 And you included some things that were not done as
21 part of the Phase III reformulated gasoline

1303

1 regulations. The one pound in the wintertime is
2 not part of our regulations.

3 Q. And that is where we will disagree. We
4 are arguing--we don't argue that it is part of
5 Phase III, but we argue that it was an
6 accommodation that had to be made to the ethanol
7 industry.

8 But we very much appreciate you. I know
9 that my goal was to be finished with Mr. Simeroth
10 at 4:00 so that the U.S. could present its
11 arguments and we just very much appreciate
12 Mr. Simeroth coming today. Thank you very much.

13 PRESIDENT VEEDER: Thank you,
14 Ms. Callaway.

15 Are there any questions on redirect for
16 the United States?

17 MS. MENAKER: We don't have any. Thank
18 you.

19 PRESIDENT VEEDER: Thank you very much.
20 We have come to the end of your evidence. We issue
21 you a happy return and a good weekend.

1304

1 THE WITNESS: Thank you, and I wish you

2 the same.

3 MR. LEGUM: Would it be permissible if we
4 were to oxygenate our brains with a little bit of
5 coffee before we resume?

6 PRESIDENT VEEDER: I wouldn't mind doing
7 something with the atmosphere in here. We won't
8 use ethanol or MTBE. Let's have a 10-minute break.

9 (Brief recess.)

10 PRESIDENT VEEDER: Now we return to the
11 motion on excluding the documentation from Regent
12 International.

13 We turn the floor over to you, Ms.
14 Menaker.

15 MS. MENAKER: Thank you, Mr. President,
16 members of the Tribunal. Our reply to Methanex's
17 arguments will be quite brief. I will address some
18 of the legal arguments made by Methanex this
19 morning, and then I propose that the Tribunal call
20 on Mr. Legum to respond to Methanex's last argument
21 that was more factual in nature and based on the

1305

1 equities in the case.

2 I think as far as the legality of the
3 actions taken, that this is a very simple matter.
4 We provided to you yesterday an ordinance by the
5 Brea City Code which provides that no unauthorized
6 individual may remove anything from a trash can
7 regardless of where that trash is located. It
8 doesn't matter under the Brea municipal ordinance
9 whether the dumpster in question was located on

10 public or private property. It is immaterial. The
11 Brea City Code makes it a misdemeanor for anyone,
12 other than the owner thereof, the owner's agents or
13 employees of an officer or employee of the city or
14 permittee's agent or employees to remove
15 anything--remove any of the contents of a trash
16 container, and, therefore, we believe that the
17 manner in which these documents were retrieved
18 violated this provision of the Brea City Code and
19 was, therefore, unlawful.

20 Now, if I understand it, Methanex's
21 argument is that the Tribunal should disregard this

1306

1 code because it is somehow either unconstitutional
2 under California law or somehow otherwise
3 inconsistent with California law, and in our view,
4 that is not the case.

5 First of all, it is not this Tribunal's
6 role to rule on the constitutionality of a domestic
7 state's law. So this law is in force in California
8 in Brea County, and this Tribunal's role is not to
9 rule on whether this Brea City Code is
10 unconstitutional under California state law. That
11 is our first point.

12 Second, Methanex has pointed to no case or
13 statute that purports to override this statute or
14 to rule it unconstitutional or to hold that it
15 conflicts with any state law.

16 Furthermore, we provided you with a case

17 yesterday, the Schlessinger, the Walt Disney case.
18 The case is a recent case, in March of this past
19 year, March 2004, in the California Superior Court.
20 The Court in that case was dealing with a
21 very similar code, municipal code, from the city of

1307

1 Burbank. That city code similarly provided that,
2 and I will quote from the code--and I will provide
3 copies for the Tribunal--that no person other than
4 any officer, employee, contractor of the city,
5 permittee as authorized under section 24-11(c) or
6 the authorized user thereof shall remove, move, or
7 interfere with any garbage, solid waste, green
8 waste or recyclable material container or the
9 contents thereof.

10 You can see in content it was very similar
11 to the Brea code that we are looking at here. The
12 Court in the Schlessinger case did find that here
13 they say that SSI took Disney's documents
14 unlawfully in the first instance, relying on this
15 municipal code. There is no indication that the
16 Court at all questioned the applicability of the
17 Burbank Municipal Code or had any doubts as to its
18 constitutionality or compliance with other aspects
19 of California state law.

20 PRESIDENT VEEDER: That is the passage at
21 page four of the report that we looked at?

1308

1 MS. MENAKER: Yes, it is.

2 Thank you.

3 Furthermore, Methanex has not shown in
4 what way this Brea City Code could conflict with
5 state law in any event. They haven't pointed to
6 any California state statutory law or common law
7 with which this city code would conflict. Most of
8 the jurisprudence, all of the cases that Methanex
9 has provided to us this morning are distinguishable
10 and are really off point. Methanex has not drawn a
11 distinction between jurisprudence, interpreting the
12 constitutional provisions, the Fourth Amendment of
13 the United States Constitution or similar
14 provisions in state constitutions, and I think what
15 illustrates this point is Methanex basically had
16 argued that the Brea City Code would be
17 unconstitutional because police officers would be
18 prevented from gathering this evidence and they
19 pointed to a number of cases, criminal cases, where
20 courts had held that police officers--where courts
21 had admitted evidence that had been gathered by

1309

1 police officers by rummaging through trash.

2 Now, the Brea City Code on its face does
3 not cover police officials, law enforcement
4 officials. The code applies--it says no person
5 other than the owner thereof, the owner's agents or
6 employees or an officer or employee of the city.

7 Now, law enforcement officials would be officers of

8 the city, and would not be covered by the code.

9 PRESIDENT VEEDER: What about an FBI
10 agent?

11 MS. MENAKER: I believe that under this
12 reading--I am not certain. I would have to look
13 into it, but it says officer or employee of the
14 city or permittee's agents or employees authorized
15 for such purpose.

16 What that means is if a private individual
17 rummages through the trash, any trash, regardless
18 of where it is located in Brea County, that an
19 individual would be violating the City Code and
20 that is a misdemeanor in Brea County. However, if
21 a police officer did the same thing, and rummaged

1310

1 through the trash and got documents, that police
2 officer is not subject to this code. If that
3 police officer later wants to introduce that
4 evidence in to court, that is where the Fourth
5 Amendment and the exclusionary rule comes into
6 play. The Fourth Amendment protects citizens
7 against unlawful searches and seizures by the
8 government. That is meant to protect against
9 police overreaching and doing unlawful searches and
10 seizures. Normally when you do a search you have
11 to get a warrant and determine probable cause, and
12 they determine whether there is a search, and then
13 they look into whether there was a reasonable
14 expectation of privacy. That is the whole line of

15 cases that you have looked at, that look at whether
16 you had that reasonable expectation of privacy:
17 Where was the trash? Was it on public property?
18 Private property?

19 So what would happen in this case is if a
20 police officer obtained evidence from a dumpster in
21 Brea County, he would not be subject to this

1311

1 provision of the code. If he went into court and
2 he attempted to introduce that and he got it
3 without a warrant, the exclusionary rule would come
4 into play, and he would have to, if he wanted to
5 have the evidence admitted, show that there was no
6 reasonable expectation of privacy in that evidence
7 or whatever the proper standard is, that it wasn't
8 a search that required a warrant. If the Court
9 held that there was a reasonable expectation of
10 privacy or whatever the correct standard is, it
11 would exclude the evidence; if it held otherwise,
12 it would admit it.

13 But that in no way impacts on a city,
14 county or a state's prerogative to enact laws that
15 prohibit private individuals from engaging in this
16 type of behavior. They are two separate things.

17 So, we think the law on this point is
18 quite clear. I don't purport to go through all of
19 the cases to distinguish them, but we are happy to
20 discuss any cases in particular to the extent that
21 you have questions regarding them.

1312

1 PRESIDENT VEEDER: You are going to hand
2 in the relevant code for the Walt Disney case?

3 MS. MENAKER: Yes, I can do that.

4 PRESIDENT VEEDER: At the same time, if
5 you look at paragraph D, which you cited in the
6 fuller context of the Brea City Code, you gave us a
7 copy that begins with paragraph 8.28.130, paragraph
8 A. Would you have the preceding parts of this code
9 because--

10 MS. MENAKER: I am certain that we could
11 provide you with as much of the code as you would
12 like.

13 PRESIDENT VEEDER: If you look at
14 paragraph D, the phrase, where the same shall be in
15 place for collection, and you go back to paragraph
16 A, the top of the page, the meaning of that phrase
17 may become clearer if we look at the earlier part
18 of this code. It may be a place for collection by
19 an outside agency in the street rather than some
20 internal place for collection.

21 MS. MENAKER: I will get those parts of

1313

1 the code.

2 So, unless--

3 PRESIDENT VEEDER: We are still reading
4 these cases, and we still have a lot of catching up
5 to do. So we won't take up your offer at this

6 stage, and we will now turn to the factual
7 assessment and Mr. Legum.

8 MR. LEGUM I will also be brief.

9 Mr. President and members of the Tribunal,
10 the version of events that Methanex presented to
11 the Tribunal earlier this week through two
12 witnesses that lacked personal knowledge of how
13 these materials were collected was that they were
14 collected from an outside parking lot, a dumpster
15 that was outside in that parking lot, and from a
16 parking lot that was adjacent to the building in
17 which Mr. Vind worked.

18 Yesterday we heard from Mr. Vind, a
19 witness with personal knowledge of the facts, and
20 he testified that there was no lot adjacent to this
21 building, there was no outside dumpster. The

1314

1 photographs that Mr. Vind took and offered, the
2 plan of the premises, and the satellite images that
3 we provided all confirmed Mr. Vind's testimony on
4 this subject.

5 Methanex this morning has effectively
6 withdrawn the version of events that it presented
7 earlier this week. There is, as we sit here today,
8 we submit, no evidence on how these documents were
9 collected before this Tribunal.

10 Now, Methanex is now basing its arguments
11 on a new set of operative facts; that is, that the
12 trash was, in fact, inside Mr. Vind's building,

13 behind the pink doors that we saw in the
14 photographs, and that the doors were usually left
15 unlocked. That is, however, as the President
16 pointed out in a question to Mr. Dugan, not what
17 the testimony shows. The testimony shows, and I am
18 going to quote from the transcript at page 1018,
19 lines three through seven:

20 Question, by Mr. Dugan:

21 "Now, you talked about the closed

1315

1 trash area. Was that area locked?"

2 Answer--

3 PRESIDENT VEEDER: Just a minute, please.

4 (Pause.)

5 MR. LEGUM: 1018.

6 "QUESTION: Now, you talked about the
7 closed trash area. Was that area locked?"

8 "ANSWER: It was supposed to be
9 locked. I think in practice the cleaning
10 people, being as lax as they were, did not
11 keep it locked at all times."

12 There is, we submit, a difference between
13 "usually left unlocked," and "locked but not at all
14 times."

15 However, whether it is usually left
16 unlocked or locked but not at all times, is
17 irrelevant here, in any event, given that, as Ms.
18 Menaker has just demonstrated, the ordinance
19 applies whether the doors were locked or unlocked,
20 and whether the trash was inside or outside.

21 We saw this morning a new piece of

1316

1 evidence offered by Mr. Dugan, as he put it, to
2 further demonstrate the good faith of the
3 investigator in attempting to comply with
4 applicable law in collecting these materials. This
5 is X14 that I am referring to.

6 Unfortunately, like so much of the
7 evidence that we have seen from Methanex this week,
8 this photograph raises more questions than it
9 answers. The photograph was taken on October 11,
10 2000, and as Mr. Dugan described it, this was the
11 photograph that was taken when the document
12 collection operation stopped and Mr. Vind moved to
13 a new location. As I said, this photograph was
14 taken in October of 2000. Mr. Vind's testimony,
15 and I would refer the Tribunal to page 1007, lines
16 15 to 16, Mr. Vind's testimony was that he moved
17 offices probably in January of 2001.

18 In Ms. Morisset's declaration at page two,
19 she said that the document collection operation
20 lasted from August of 2000 through February of
21 2001, and she testified that the operation was

1317

1 terminated because Mr. Vind moved to a new
2 location. The reference is transcript page 718,
3 line two, through 719, line five.

4 Well, if Mr. Vind moved in January of
5 2001, or, as Ms. Morrisset's evidence suggests,
6 February of 2001, what is this photograph in
7 October of 2000 of? It is unclear what this is of,
8 and it certainly wasn't taken at the time when Mr.
9 Vind moved offices according to the evidence that
10 is of record in this case. So, yet again, this
11 unauthenticated photograph raises more questions
12 than it answers.

13 Another point that Mr. Dugan made under
14 the heading of "even if the documents were obtained
15 illegally, the Tribunal should admit them," was
16 that the United States had somehow thwarted the
17 collection of evidence by Methanex. The record
18 shows no such thing. Methanex has been able to get
19 witness statements from any witness that would like
20 to provide them. We have done nothing to prevent
21 Methanex from doing anything of that kind.

1318

1 Presumably Methanex is referring to its application
2 to the California courts under Section 1782.
3 Methanex applied to the courts. The United States,
4 as is its right, opposed that motion. Methanex
5 then withdrew its applications before there was any
6 decision. The record shows no efforts by the
7 United States to improperly thwart Methanex's
8 collection of evidence.

9 Finally, on this subject of the Tribunal
10 admitting evidence even if the record establishes

11 that it was illegally obtained, it is undisputed by
12 the parties that the Tribunal has the authority to
13 exclude the evidence if it finds that it was
14 illegally obtained. We submit that it is evident
15 that documents illegally fished out of another
16 man's trash have no place in an international
17 arbitration under a treaty.

18 Thank you very much.

19 Unless you have any questions?

20 ARBITRATOR ROWLEY: I have a question and
21 a comment which indicates an area of uncertainty I

1319

1 have; and I will direct the question between the
2 two of you and can grapple over which, if either of
3 you wish to answer it. Perhaps you could have a
4 look at X9 or X8.

5 In X9, I am directing your attention to
6 the two trash doors in either of the two
7 photographs at the bottom of that and the same
8 trash doors in X8. Any one of them will do.

9 MR. LEGUM: One moment, please.

10 ARBITRATOR ROWLEY: You will find that my
11 speed is rather lackadaisical.

12 MR. LEGUM: I am afraid the copies I have
13 are not marked.

14 ARBITRATOR ROWLEY: X9 is the photograph
15 in which the bottom two pictures have a focus on
16 two trash doors, the one on the bottom right
17 showing just the doors, the one on the bottom left
18 having been taken somewhat further back.

19 MR. LEGUM Thank you. I have located it.
20 ARBITRATOR ROWLEY: Now, Ms. Menaker spoke
21 about reasonable expectation of privacy, and that

1320

1 if a police officer in Brea had taken something out
2 of a dumpster, he or she would have been entitled
3 to do it without breaching the municipal ordinance.
4 The question would then turn on admissibility in a
5 proceeding, and then that would turn on reasonable
6 expectation of privacy.

7 What I am interested in knowing, having
8 regard to these doors in question, whether there is
9 case law in California specifically or in the
10 United States more generally, which would help us
11 as to whether there is a reasonable expectation of
12 privacy that the police, without a warrant, will
13 not go and open those closed doors in a situation
14 like this, and I imagine you would have brought
15 such cases to our attention if you had them at
16 hand. So if you are not able to answer that now, I
17 will understand, but I would be interested in
18 knowing whether there is law which helps us there.
19 And as I say, if you are not able to answer that
20 now, I quite understand, and you can comment and
21 then I will go to my area of concern.

1321

1 MR. LEGUM I would just note that our
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2 submission is that Methanex is not a law
3 enforcement agency, and there is no allegation that
4 anyone involved in this documentation collection
5 operation was acting as a law enforcement officer
6 at the time. So our submission is that those cases
7 are irrelevant. However, we would be pleased to
8 take a look and see what we can find to answer your
9 question.

10 ARBITRATOR ROWLEY: I think the question
11 of reasonable expectation of privacy would apply,
12 as I read the law from a quick read, whether
13 evidence has been obtained unlawfully.

14 MS. MENAKER: That might be the case in
15 the absence of a specific state law, including a
16 state ordinance or a county ordinance that spoke to
17 the question. If there were no such ordinance in,
18 Burbank, in the Schlessinger case, or Brea here,
19 then the Court might look to general common law to
20 determine if there was that interest of reasonable
21 expectation of privacy in that particular garbage

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1 or whether it constituted a trespass or an invasion
2 of privacy or any of the other things, any other
3 kind of common law tort even.

4 However, here the Court would not need to
5 do such a thing because there is a law that is on
6 point.

7 ARBITRATOR ROWLEY: I understand what you
8 are saying, but at this stage I haven't come to

9 terms with your submission that we are--it would be
10 beyond our jurisdiction to determine whether that
11 ordinance is effective law or not, and if it is
12 possible that the ordinance as posited by Methanex
13 is invalid, then the question is relevant.

14 Now, the area of slight concern and
15 comment I have, and this relates, Mr. Legum, to
16 your submissions, you say we can safely put aside
17 the evidence of Mr. Puglisi and Ms. Morisset, as to
18 how the evidence was collected because it has now
19 been shown that there was not a dumpster out in the
20 open in an adjacent parking lot.

21 In that connection, what troubles me

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1 slightly is the testimony given by Mr. Vind
2 yesterday at page 1018 starting at question 18,
3 carrying over the page and going through line
4 three. I will just read it into the record, once
5 you get there. At 1018, answering a question at
6 line 18, he says, "Right in front of it is an
7 area," and we are talking about the doors, "right
8 in front of it is an area where a trash truck was
9 designed so the trash truck could back up there and
10 unload the dumpster. I believe the practice was to
11 roll the dumpster out, and then the trash truck
12 could pick it up, which is in the U.S.--that is how
13 they do it, and toss it all in the trash truck."

14 Now, my concern is this: I know Mr. Vind
15 said, "Well, that area is not an adjacent parking
16 lot. Indeed, there are diagonal white lines that

17 if the picture were larger you would see is
18 specifically indicated to be a no parking area, "
19 but I suppose in description, especially
20 descriptions that are second-hand as to whether it
21 is an adjacent parking lot or an area adjacent, and

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1 a dumpster is outside, there is at least room for
2 interpretation. I don't know how long, if the
3 practice was to take the dumpster out from behind
4 this door and leave it for collection, it was left
5 there. Was it taken out half an hour before the
6 event? Was it taken out the night before? And so
7 on.

8 So I suppose, just so you know what I am
9 grappling with, it is possible that viewed
10 generously the evidence given could support a
11 scenario in which the dumpster was taken out from
12 behind these doors, left in front of them every
13 Thursday night, with the dumpster arriving every
14 Friday morning, and with the operatives coming
15 along in the dark on Thursday night and going
16 through them. I simply don't know, but that is an
17 area that is an open possibility.

18 MR. LEGUM: If I may, and the question was
19 not put to Mr. Vind, but there are effectively two
20 ways of interpreting his testimony. One is the way
21 that you have just described it, which is where,

1 presumably, employees of the building pull the
2 dumpsters out--pull the dumpster out for pick up by
3 the trash collection truck and leave it there for
4 some period of time.

5 The other scenario, which--again, it is
6 not the subject of testimony, is where it is the
7 trash collection agents themselves that open the
8 doors, pull out the dumpster and dump it in the
9 truck. That is not an uncommon scenario in the
10 United States, and given the other testimony given
11 by Mr. Vind, particularly that this was in a very
12 public place, that there was a great deal of
13 concern on the part of the owners and the operators
14 of the fine hotel that was right across the way,
15 that garbage not be lying out in front of the place
16 to essentially disfigure what was otherwise a nice
17 environment, we submit that the reasonable
18 interpretation is the latter, that what was
19 happening was the dump trucks would pull up, the
20 trash collection agents would open the doors and
21 pull out the trash and throw it away.

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1 There is one additional point I would like
2 to make, and that is that the frequency of
3 collection reflected in--give me a moment, and I
4 will give you an Exhibit No.

5 PRESIDENT VEEDER: X1.

6 MR. LEGUM: The frequency of collection

7 noted in X1 does not reveal a consistent pattern.
8 In some cases the collection dates seem to be on a
9 daily or near daily basis. Other dates it seems to
10 be less so, although I haven't sat down and
11 analyzed it, but it does not appear to be a
12 scenario where the dumpster was pulled out and left
13 outside once weekly or twice weekly.

14 ARBITRATOR ROWLEY: That is a good point
15 and that responds to my suggestion of a weekly take
16 off. I am just offering the possibility of a
17 generous interpretation, and I simply don't know
18 how frequently the dumpster was filled up and
19 emptied. But thank you. That is helpful.

20 MR. LEGUM: I believe Mr. Clodfelter has a
21 further response to the legal question you asked.

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1 MR. CLODFELTER: Mr. Rowley, I think we
2 can at least give you a partial answer to the
3 question on the law. I do want to preface it with
4 the point that it is not covered by the expectation
5 of privacy. Obviously if the ordinance does apply
6 and is valid, there is no expectation for lack of
7 an expectation of privacy. The ordinance on its
8 face would make the removal of the solid waste a
9 violation and, therefore, illegal.

10 What we didn't do this afternoon is walk
11 you through the other part of Mr. Dugan's argument,
12 the argument basically that under the California
13 law of abandonment somehow these documents were
14 abandoned and there were no rights in them

15 whatsoever under California common law.

16 We have an ordinance that applies. So it
17 doesn't matter what the California common law does,
18 the California common law of an abandonment. Let's
19 assume the ordinance did not apply and we are only
20 looking at the California common law of
21 abandonment.

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1 The common law of abandonment arises in a
2 number of circumstances and it does arise in the
3 context of these Fourth Amendment cases and whether
4 or not the fruits of a seizure can be admitted as
5 evidence under the exclusionary rule. That is a
6 separate body of law and whether or not evidence is
7 admissible under the exclusionary rule as a
8 violation of the Fourth Amendment constitutional
9 guarantee against unreasonable searches and
10 seizures, is a separate question from whether or
11 not state law--where state law draws the line of
12 when property is abandoned, when trash is abandoned
13 and rights are relinquished. Let's go into that
14 law a little bit. I encourage you to read the
15 cases carefully because it is a tricky area.

16 We begin first with Mr. Dugan's Tab 19.
17 This is the reference he made to the American Law
18 Reports fifth and the annotation entitled "Searches
19 and Seizures: Reasonable expectation of privacy in
20 contents of garbage in trash receptacle."

21 This is an annotation that looks at this

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1 question of Fourth Amendment search and seizure
2 guarantees. Again, that is not the body of law we
3 are concerned with here because this is not a
4 search and seizure case. It is not a question of
5 excluding evidence from criminal prosecution
6 governed by the Constitution. We are not invoking
7 in other words, the U.S. Constitution to keep the
8 documents out.

9 The law of abandonment is considered in
10 these cases. Mr. Dugan referred to the sentence on
11 page 26 of this annotation. I believe he
12 highlighted it for us in the copies of this
13 annotation they distributed. Let me read the
14 sentence. He said, "The majority of courts to be
15 confronted with the question have rejected the
16 argument that ordinances regulating the collection
17 of trash, rendered garbage searches and seizures
18 illegal, while the minority of cases" and then he
19 goes into the minority of cases, leaving the
20 impression that perhaps California is in the
21 majority. But if you look at page 67 of that

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1 annotation, under B, the annotation goes on,
2 "Courts in the following cases in determining that
3 warrantless searches and seizures of garbage
4 violated the rights of those who had previously

5 owned the items seized cited in support of the
6 conclusions ordinances governing the collection of
7 rubbish" and the principal case they site is the
8 case of People versus Krivda, California Supreme
9 Court case of 1971.

10 Krivda is interesting because it involved
11 the seizure of trash which contained marijuana
12 which the defendant sought to suppress as a
13 violation of Fourth Amendment guarantees. The
14 trash was put into a bag, the bag into a
15 receptacle, the receptacle carried to the curb, and
16 the trash collector actually came along and removed
17 the bag and put it in the trash collection truck
18 and drove away. That is where the police stopped
19 the truck. Removed the bag. Krivda said there was
20 no abandonment of that trash even though it had
21 made its way all the way into the trash truck.

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1 Now, Krivda has been the subject of other
2 treatment over the years. First of all, California
3 adopted by referendum an amendment to its state
4 constitution to prohibit the exclusionary rule. It
5 didn't change the law of an abandonment, but it
6 said if a police officer violates the law of
7 abandonment and takes trash, or any other illegal
8 evidence, California courts won't exclude it under
9 a state prosecution. That is a side issue.

10 Then the question of the applicability of
11 Krivda in cases where the U. S. constitutional
12 guarantee was invoked came up, and the courts held,

13 we are not governed by state law of abandonment in
14 determining under federal law whether the Fourth
15 Amendment applies. That is what the Greenwood case
16 says, and they supplied it to you earlier, and I
17 think it is Tab 3 of their packet. That is what
18 Greenwood said. I can read you that passage
19 quickly.

20 "An individual state may surely construe
21 their own constitutions as imposing more stringent

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1 constraints on police conduct than does the federal
2 constitution. We have never intimated, however,
3 that whether or not a search is reasonable within
4 the meaning of the Fourth Amendment depends on the
5 law of the particular state in which the search
6 occurs. "

7 They are saying, "Fine, we are not going
8 to disturb state law, Krivda can say what it says
9 about abandonment, but for purposes of federal
10 constitution law we are not governed by that. We
11 have our own principles of when a seizure is
12 valid. "

13 California courts have returned to this
14 issue as well. There were two I would like to
15 mention in addition to the Disney case which Ms.
16 Menaker cited to you earlier. And these are cases
17 cited by Methanex.

18 The first case is their case in tab 1, the
19 Ananda Church case. That is not a Fourth Amendment

20 case. It is a civil action against an insurance
21 company who refused to defend the Ananda Church

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1 under its liability insurance policy when in turn
2 the church had been sued because its lawyers sent
3 people to collect the trash of a woman who had sued
4 them for sexual harassment--I am sorry, had sent
5 someone to collect the trash of the lawyers of a
6 woman who had sued them for sexual harassment.

7 Now, some people read the case as pulling
8 back from the principle announced in the Krivda
9 case. In fact, it is clearly distinguishable, and
10 it notes the distinction, and some confusion of the
11 effect of Greenwood on Krivda, and I will not get
12 into that. The interesting thing about the case is
13 how they describe the case. I refer you to page
14 six of the case. The reference in 14. "Documents
15 which have been placed in an outdoor trash barrel
16 no longer retain their character of personal
17 property of the one who has discarded it."

18 I won't get into the complicated argument
19 why even this case does not represent a retreat
20 from Krivda. But, even if it is, it is only a
21 retreat as far as a trash container outside, which

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1 is not what we have here.

2 The other case, I would like to refer to

3 you in this partial response to your question, Mr.
4 Rowley, and that is the case at Tab 2, the Ayala
5 case. I think this case was, I am sure
6 inadvertently, was misdescribed by Mr. Dugan. This
7 is in connection with his definition of privilege.
8 He stated that if the container is in the
9 curtilage, it is available to be searched and trash
10 removed from it. That is clearly a misreading of
11 the case.

12 Let me refer you to his definition of--let
13 me refer you to page 22. The paragraph that begins
14 at 33 and 34. I will go into the middle.
15 "Moreover, the trial court found that he had
16 abandoned the containers, the factual finding
17 supported by substantial evidence into which we
18 accordingly defer. Abandoning them, he
19 relinquished any expectation of privacy in them.
20 As a general matter, 'the overwhelming weight of
21 authority rejects the proposition that a reasonable

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1 expectation of privacy exists with respect to trash
2 discarded out of the home and the curtilage
3 thereof.' "

4 Instead of being fair game inside the
5 curtilage, the case actually says it has to be
6 outside the curtilage. The curtilage is the
7 property adjacent to the building. Even if the
8 limitation of Ananda didn't apply, which talked
9 about outside containers, the other case cited by
10 Methanex, Ayala, said if it is outside but inside

11 the curtilage, it is out of bounds.

12 We wish we would have had more time to
13 absorb all of these cases. Most are irrelevant
14 because they deal with abandonment issues. One
15 deals with the question of what an abandonment of a
16 child means and the rest are other states. But a
17 fair reading of California law of abandonment is
18 that these documents, whether you look at them
19 inside the two pink doors or temporarily placed
20 outside the pink doors for removal by a trash
21 collection company, have not been abandoned, and,

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1 therefore, even if there were not a clearly
2 applicable ordinance effective and covering this
3 situation, which we believe there is, these
4 documents would not have comported with California
5 law. Fortunately, you don't have to reach that
6 decision.

7 Thank you.

8 ARBITRATOR REISMAN: I have one
9 clarification. Mr. Dugan, in his initial
10 presentation, said that these documents were
11 admissible because they were lawfully secured, and
12 the reference to lawfully secured is the law of
13 California or whatever part of California governed.
14 If I understand the United States, it is analyzing
15 this matter in the same way. These documents are
16 admissible or inadmissible if they were lawfully or
17 unlawfully secured under the law of California.

18 That seems to be the common position.

19 MR. CLODFELTER: That is the view of the
20 United States.

21 PRESIDENT VEEDER: We will go outside for

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1 a minute. We will be back as soon as we can.

2 MR. DUGAN: I have a lot to say.

3 PRESIDENT VEEDER: We may have some
4 questions for you too. But as regards cases, we
5 found on our chairs I think six new cases. Where
6 did they come from?

7 MR. DUGAN: Those are from us, and they
8 are the cases we cited this morning that we
9 promised you this morning we would get to you.

10 PRESIDENT VEEDER: Can you give us five
11 minutes and we will come back.

12 (Brief recess.)

13 PRESIDENT VEEDER: Let's resume.

14 Before we call upon you, Mr. Dugan, and we
15 are going to call upon you as to how we deal with
16 this best, we would like to raise something which
17 is a matter of considerable concern to the
18 Tribunal, and that is the unsatisfactory state of
19 the evidence on precisely how the two individuals,
20 and we know their names, Mr. Jim Stirwalt and Mr.
21 Terry Dunne, retrieved the documentation from the

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1 dumpster behind the pink doors or otherwise. These
2 are the two individuals that you are potentially
3 proffering as witnesses to the Tribunal yesterday
4 morning, and we understand they may still be
5 available as witnesses. They will provide the best
6 direct evidence as to how they retrieved the
7 documentation. We are concerned that the factual
8 state of the evidence as we have it at the moment
9 is unsatisfactory as it is when there are two
10 witnesses who could perhaps improve on that factual
11 position.

12 We ask you again, are you making any
13 application to the Tribunal to produce these two
14 witnesses, either in the form of witness statements
15 or videolink evidence or telephone or otherwise?

16 MR. DUGAN: If I could just consult.

17 (Pause.)

18 MR. DUGAN: We would like to make an
19 application to present, if we can do it, the video
20 conference--the testimony of the two witnesses, Mr.
21 Dunn, and I believe it is not Mr. Stirwalt, it is a

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1 Mr. McGanish, and they are the ones, as I
2 understand it, that actually acquired the
3 documents. We will do what we can to bring them
4 before the Tribunal next week at an appropriate
5 time, perhaps Tuesday.

6 PRESIDENT VEEDER: Let's take it more
7 slowly. We have taken the name Stirwalt--

8 MR. DUGAN: We talked to Mr. Stirwalt and

9 he is not the one who actually did it. It is Mr.
10 McGanish or something.

11 PRESIDENT VEEDER: Can you spell that name
12 for us?

13 MR. DUGAN: I believe it is
14 M-C-G-A-N-L-I-S-H, but I am not entirely sure of
15 that--M-C-G-A-N-I-S-H--

16 PRESIDENT VEEDER: There is a certain time
17 factor involved in all of this, and what we would
18 invite you to do while making this application is
19 to produce witness statements from the two
20 individuals by Sunday night, and we would have to
21 see whether we would allow the application having

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1 read those documents and having heard, of course,
2 the United States. Is that feasible?

3 MR. DUGAN: I believe that is feasible,
4 yes.

5 PRESIDENT VEEDER: If we allow the
6 application, would they be available Monday by
7 videolink.

8 MR. DUGAN: I will have to check with
9 them. They have expressed their intent to
10 cooperate, but I will have to check with them.

11 PRESIDENT VEEDER: We will hear from you
12 on other matters, don't think we are cutting you
13 off, but just dealing with this application, can we
14 turn it over to the United States?

15 MR. LEGUM: We have no objection to

16 proceeding as the Tribunal suggested, receiving the
17 statements provisionally, subject to the United
18 States presenting our views on Monday as to whether
19 we should go forward with this or not.

20 PRESIDENT VEEDER: Can we set a time
21 Sunday night? We would like to read them and talk

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1 to each other on Sunday night. I am sure the
2 United States would like to read them Sunday night
3 to be prepared for Monday morning. Can you get
4 them to our hotels by 6:00 Washington time?

5 MR. DUGAN: We will do our best.

6 PRESIDENT VEEDER: If you can make
7 arrangements to get these documents to the United
8 States by 6:00.

9 MR. DUGAN: We will have to find out where
10 you are staying.

11 PRESIDENT VEEDER: We are happy to tell
12 you.

13 MR. DUGAN: We will e-mail them to the
14 United States as we usually do.

15 PRESIDENT VEEDER: The other thing we are
16 going to suggest, we have a lot of legal materials
17 and a lot of reading to do, if there is any more to
18 come in, whether today or tomorrow, if they could
19 be e-mailed or sent to our hotels and given the
20 time--it is now quarter past five--we think it
21 would be inappropriate to invite you, Mr. Dugan, to

1 have you reply in full to what you just heard. We
2 would like to weed out what you gave us this
3 morning and what the United States gave us and then
4 come back to this Monday morning.

5 MR. DUGAN: You don't want to hear from me
6 at all?

7 PRESIDENT VEEDER: Not at the moment. We
8 certainly do want to hear from you in full on
9 Monday morning. Does that cause you a problem?

10 MR. DUGAN: Not at all. As long as I can
11 be heard in full.

12 PRESIDENT VEEDER: You certainly will be.
13 United States, you made reference several
14 times to the fact that you were short in time in
15 responding to the legal materials you received this
16 morning. If there are further legal materials, if
17 you could do that by Sunday night and make sure Mr.
18 Dugan has copies as well.

19 MR. LEGUM: We will do that. Mr.
20 Clodfelter give a preliminary response, and we may
21 wish to amplify on that after we have had a chance

1 to consider it as well.

2 PRESIDENT VEEDER: Can we ask you a
3 question, Mr. Dugan, about Mr. Stirwalt and Mr.
4 McGanish. Do they succeed each other or was it Mr.
5 McGanish all the way through?

6 MR. DUGAN: I hesitate to say anything

7 because I have been wrong so many times. I believe
8 it was Mr. McGanish all the way through and Mr.
9 Stirwalt hired him.

10 PRESIDENT VEEDER: Was it Mr. McGanish who
11 took the photograph we have just been shown of the
12 second premises?

13 MR. DUGAN: I don't know. I would have to
14 go back to Ms. Morisset and ask her.

15 PRESIDENT VEEDER: If you would check the
16 date, it is an important date.

17 MR. DUGAN: We will try to do that as
18 well.

19 PRESIDENT VEEDER: Thank you very much. I
20 think we are going to stop here, unless any party
21 has any other application to make, and we ought to

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1 resume Monday, 9:00--we would suggest 9:00 to be
2 prudent. Does that present difficulties for any
3 party? Let's resume Monday at 9:00. We will
4 certainly give you our hotels and e-mails.

5 MR. DUGAN: If Ms. Stevens could e-mail
6 that information to us.

7 Thank you very much.

8 (Whereupon, at 5:17 p.m., the hearing was
9 adjourned until 9:00 a.m., Monday, June 14, 2004.)

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1 CERTIFICATE OF REPORTER

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3 I, David A. Kasdan, RDR-CRR, Court
4 Reporter, do hereby testify that the foregoing
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14 financially or otherwise interested in the outcome
15 of this litigation.

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DAVID A. KASDAN, RDR-CRR

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I, Cathy Jardim, RPR, Court Reporter, do hereby testify that the foregoing proceedings were stenographically recorded by me and thereafter reduced to typewritten form by computer-assisted transcription under my direction and supervision; and that the foregoing transcript is a true record and accurate record of the proceedings.

I further certify that I am neither counsel for, related to, nor employed by any of the parties to this action in this proceeding, nor financially or otherwise interested in the outcome of this litigation.

CATHY JARDIM, RPR