

WILLIAM J. PIEL

1 Program.

2 Q. Your customers were
3 refineries?

PLAINTIFF'S
EXHIBIT

13

4 A. That's right.

5 Q. And is that the marketplace
6 that you're referring to?

7 A. Yes.

8 Q. Let me mark another exhibit.

9 MR. MILLER: We'll go off
10 the video record.

11 THE VIDEOGRAPHER: Off the
12 record 11:05.

13 (Discussion is held off the
14 record:)

15 (Exhibit 12 is marked for
16 identification.)

17 THE VIDEOGRAPHER: Back on
18 the record 11:09.

19 BY MR. MILLER:

20 Q. This document dated April,
21 1995 is on the letterhead of the EPA
22 Office of Mobile Services, Technical
23 Overview. It's entitled Origin of the
24 Remediation Program and the first bullet

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1 is: The concept of reformulated gasoline
2 was originally generated, developed and
3 promoted by industry, not the
4 Environmental Protection Agency or other
5 parts of the federal government.

6 Do you see that entry?

7 A. Yes, I do.

8 Q. Is it your understanding
9 that your employer, ARCO Chemical, played
10 a role in the development of the use of
11 oxygenates including MTBE in gasoline?

12 MR. BROMME: Objection to
13 the connection between that
14 question and this document. The
15 document is just hearsay. Who
16 knows who wrote it or whether they
17 knew what they were talking about.
18 But I do not object to the
19 question.

20 THE WITNESS: I was going to
21 ask you can you restate the
22 question, again. It was a little
23 long for me.

24 MR. MILLER: Counsel, if

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1 you're not going to object to the
2 question, I would suggest that you
3 remain silent because making
4 speeches as opposed to objections
5 is well-known to be improper.

6 THE WITNESS: But I was
7 going to ask the question --

8 MR. BROMME: I don't
9 object --

10 MR. MILLER: It's not a
11 problem.

12 THE WITNESS: I want -- I
13 want to clarify --

14 MR. BROMME: -- to the
15 second part of your question. I
16 do object to the linkage of your
17 question with the document. I
18 thought I had made that clear, but
19 apparently --

20 THE WITNESS: Okay. Can you
21 restate the question again?

22 BY MR. MILLER:

23 Q. Yes.

24 A. Because it wasn't in the

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1 document. That's what I was wondering.

2 Q. All right. This document
3 has a section concerning reformulated
4 gasoline.

5 A. Right.

6 Q. First I'm going to read it
7 to you. It states: The concept of
8 reformulated gasoline, RFG, was
9 originally, developed and promoted by the
10 industry not the Environmental Protection
11 Agency or other parts of the federal
12 government.

13 A. Right.

14 Q. All right. I want to see if
15 we can understand what this is saying.

16 First of all, did ARCO
17 Chemical play a leading role in the
18 development of the use of oxygenates in
19 gasoline?

20 MR. MOLLER: Objection.

21 MR. BROMME: Objection to
22 the question on grounds that it
23 cannot illuminate a document for
24 which there's no foundation.

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1 THE WITNESS: The question:
2 Did ARCO Chemical play a role in
3 developing formulated gasoline or
4 a leading role, no. But obviously
5 we developed -- helped develop
6 the market for using MTBE in
7 gasoline. That was a product that
8 we made and of course we helped
9 develop the use of MTBE.

10 BY MR. MILLER:

11 Q. And was the use of MTBE in
12 gasoline something that was later known
13 as reformulated gasoline?

14 A. No, just because you use
15 MTBE in gasoline doesn't mean it's
16 reformulated gasoline. MTBE was used
17 long before the concepts of reformulating
18 gasoline for, for supplying better, more
19 cost-effective octane in gasoline; and so
20 we were -- ARCO Chemical was key in
21 developing the use of MTBE in gasoline
22 for multiple purposes. Like I said,
23 mostly it was developed as an octane -- a
24 clean octane substitution for lead octane

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1 compounds that were being phased out by
2 the EPA.

3 Q. Okay. Did the EPA have
4 anything to do with identifying MTBE as
5 something to blend in gasoline to your
6 understanding?

7 MS. DOYLE: Calls for
8 speculation.

9 THE WITNESS: Well, the EPA
10 approved the use of all oxygenates
11 in gasoline through the waiver
12 process. They also, as I
13 remember, recall that they
14 recognized the benefits of using
15 oxygenates in gasoline. They had
16 put out a number of documents
17 before 1990 showing the use of
18 oxygenates helped reduce taillight
19 emissions from vehicles, carbon
20 monoxide, hydrocarbons and other
21 pollutants. So I mean, yes, the
22 EPA put out a lot of information
23 on oxygenates even prior to 1990
24 and the benefit of oxygenates.

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1 BY MR. MILLER:

2 Q. What I'm trying to
3 understand, if we look at this quote, it
4 says: The concept of reformulated
5 gasoline, RFG, was originally generated,
6 developed and promoted by industry.

7 A. Yes.

8 Q. Is that consistent with your
9 understanding that the original source of
10 the idea was with industry?

11 MR. BROMME: Objection. No
12 foundation.

13 THE WITNESS: What I recall
14 is the EPA was actually promoting
15 using methanol blends -- or not
16 methanol blends, but actual
17 methanol fuel as a way to, in
18 nine or ten various cities, and
19 the refining industry said here's
20 another option, that, you know, we
21 can reformulate gasoline to reduce
22 the emissions, you know, that
23 would be equal to or better than
24 you would get by substituting or

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1 mandating the use of methanol
2 vehicles in gas -- or, you know,
3 methanol vehicles in these eight
4 or nine various cities. So it
5 was, you know, it was brought to
6 the attention the oil industry,
7 refining industry brought this
8 forward as an alternative to what
9 the EPA had initially proposed
10 which was methanol cars being put
11 into nine various cities.

12 BY MR. MILLER:

13 Q. Okay. You said as an
14 alternative to this. So basically the
15 EPA suggested methanol as a potential
16 ingredient for gasoline that might
17 improve --

18 A. No. The EPA actually, as I
19 remember, supported -- originally
20 supported the use of methanol, just
21 methanol and eliminate gasoline, but to
22 do that would be very difficult for the
23 refine -- the auto industry and refining
24 industry because you would have to

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1 develop totally new cars to -- that
2 would just run on methanol fuel, not
3 gasoline, but methanol fuels.

4 Q. Okay.

5 A. And that would take -- be
6 long, expensive and take a lot of time to
7 realize the benefits of any such program.

8 Q. Okay. And then you said
9 that the oil industry developed the
10 alternative of not using ethanol but
11 instead using an alternative product
12 which was what?

13 A. Reformulated gasoline, but
14 it wasn't the ethanol. You had said
15 ethanol. I was saying methanol.

16 Q. I'm sorry. I hope I said
17 methanol.

18 A. No, you said -- I was
19 listening to you.

20 Q. Okay.

21 A. To the concept of using a
22 methanol fuel, the refining industry had
23 developed the concept -- another
24 alternative to achieving the clean air

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1 benefits and they blended or came up with
2 this idea or concept of changing the
3 properties of gasoline to reduce the
4 emissions and they had -- I think prior
5 to 1990 but I can't remember exactly
6 there was a number of demonstration
7 programs conducted by various refining
8 industry people to illustrate how
9 effective reformulated gasolines can
10 reduce emissions from existing vehicles.

11 Q. And was MTBE one of the key
12 ingredients in that reformulated gasoline
13 that was just discussed?

14 MR. MOLLER: Objection to
15 the use of the word "key" as being
16 a subjective term and, therefore,
17 vague.

18 THE WITNESS: MTBE as I
19 recall was, was a popular
20 ingredient. Many of the refiners
21 demonstration programs had used
22 MTBE as a way of achieving the
23 favorable properties that would
24 make the gasoline burn cleaner.

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1 Properties were such as reducing
2 aromatic content, improving the
3 distillation properties or
4 temperatures of the gasoline, as
5 well as reducing vapor pressure.
6 These were things that made the
7 gasoline -- reduced the emission
8 such or the gasoline in the car
9 and MTBE was one of the more
10 useful or helpful ways to achieve
11 those gasoline properties.

12 BY MR. MILLER:

13 Q. Okay. Could you tell me the
14 names of some of the members of the oil
15 industry that participated in
16 demonstrating that reformulated gasoline
17 could improve air quality during the time
18 period we're talking about which is
19 before the 1990 Clean Air Act amendments?

20 A. Just to rephrase your
21 statement a little bit --

22 MR. MOLLER: Objection. I
23 think the question's vague.

24 THE WITNESS: Yeah, I was

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1 going to say, right, would you say
2 it again 'cause it was a little
3 vague. I was trying to understand
4 it.

5 BY MR. MILLER:

6 Q. Yes. You mentioned some
7 members of the oil industry had
8 demonstration programs --

9 A. Right.

10 Q. -- to show that reformulated
11 gasoline would improve air quality;
12 correct?

13 A. Right, right.

14 Q. And this was occurring
15 before the 1990 Clean Air Act amendments;
16 is that correct?

17 A. Right.

18 Q. Okay. Could you tell me
19 the names of some of the members of the
20 oil industry that had such programs that
21 you just described?

22 A. I specifically remember like
23 Phillips and ARCO had individual programs.
24 They weren't combined. But I --

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1 Q. This would be the Atlantic
2 Richfield Company?

3 A. Right.

4 Q. Okay.

5 A. Yeah, I mean ARCO Chemical
6 did not make gasoline. I mean we weren't
7 in the business to make gasoline.

8 The -- so Atlantic
9 Richfield, ARCO Products Division,
10 Philips Oil, and I sort of recall being
11 about four programs, four individual
12 programs by four individual different
13 companies that were independent programs,
14 but I can't recall who the other programs
15 were, but I sort of recall Philips and I
16 recall the ARCO program.

17 Q. Okay. Now, with that in
18 mind, do you agree or disagree with this
19 statement: The concept of reformulated
20 gasoline, RFG, was originally generated,
21 developed and promoted by industry not
22 the Environmental Protection Agency or
23 other parts of the federal government?

24 MR. MOLLER: I'm going to

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1 object. That question was asked
2 and answered several times
3 already.

4 THE WITNESS: No, I agree,
5 the EPA did not initiate
6 reformulated gasoline.

7 BY MR. MILLER:

8 Q. Okay. If you look a little
9 bit lower in the same document, the third
10 bullet from the bottom it states:
11 Throughout much of 1991 EPA participated
12 in a regulatory negotiation process with
13 the petroleum industry, oxygenate
14 industry, state and local organizations,
15 environmental groups, auto manufacturers,
16 organizations representing the public and
17 other governmental agencies to lay out
18 the framework for RFG rule making.

19 Do you see that?

20 A. Yes, I do.

21 Q. Are you familiar with that
22 subject?

23 A. Yes, I am.

24 Q. Were you involved in some of