

IN THE CIRCUIT COURT
TWENTIETH JUDICIAL CIRCUIT
ST. CLAIR COUNTY, ILLINOIS

FRANCES E. KEMNER,
et al,

Plaintiffs,)

vs.

MONSANTO COMPANY, et al,)

Defendants.)

No. 80-L-970

Discovery Deposition of Dr. James P. Mieure
taken on behalf of the Plaintiffs

* * * * *

Taken on December 21, 1983

Reporter: Karen J. Hays

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EDWARDSVILLE, ILLINOIS 62025

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3 FRANCES E. KEMNER,)
4 et al,)

 Plaintiffs,)

5 vs.)
6)

No. 80-L-970

7 MONSANTO COMPANY, et al,)
8)

 Defendants.)

9
10
11 **APPEARANCES:**

12 Messrs. Cohn, Carr, Korein,
13 Kunin, Schlichter &
 Brennan

by Rex Carr, Esq.

On behalf of the Plaintiffs

14 Messrs. Coburn, Croft & Putzel
15 by John R. Musgrave, Esq.

On behalf of Monsanto Company

16 Messrs. Witzel & Baldwin
17 by Michele Lowe

On behalf of Western
Environmental Services
(Third Party Defendant)

18 Messrs. Schoenbeck, Tucker
19 & Schoenbeck
20 by Stephen Schoenbeck, Esq.

On behalf of Norfolk & Western

21
22
23 IT IS STIPULATED AND AGREED by and between
24 counsel for plaintiffs and counsel for defendants that
25 the deposition of Dr. James P. Mieux may be taken for

1 discovery purposes by and on behalf of the Plaintiffs,
2 pursuant to the provisions of the Illinois Civil Practice
3 Act as amended, and the provisions of the Supreme Court
4 Rules pertaining to depositions taken for discovery on
5 December 21, 1983, at the law offices of Coburn, Croft
6 & Putzel, One Mercantile Center, Suite 2900, St. Louis,
7 Missouri, before KAREN J. HAYS, C.S.R., a Notary Public
8 within and for the County of Madison, State of Illinois;
9 and that the issuance of notice and dedimus is waived
10 and that this deposition may be taken with the same force
11 and effect as if all statutory requirements had been
12 complied with.

13 IT IS FURTHER STIPULATED AND AGREED that
14 any and all objections to all or any part of this deposition
15 are hereby reserved and may be raised on the trial of
16 this cause; and that the signature of the deponent is not
17 waived.

18 * * * * *

19
20
21 DR. JAMES P. MIEURE
22 produced, sworn and examined on behalf of the Plaintiffs,
23 deposes and says as follows:

24 CROSS-EXAMINATION

25 BY MR. CARR:

1 Q Would you state your name, please.

2 A James Phillip Mieure.

3 Q And is it Doctor or Mister or --

4 A It's Doctor.

5 Q All right. Dr. Mieure, what's your present

6 position with Monsanto Chemical?

7 A Manager of Product Acceptability for Plasticizers

8 and Rubber Chemicals.

9 Q And how long have you held that position?

10 A One year.

11 Q Okay. Directing your attention to the years

12 '78, '79, '80 and '81, '82, could you tell us your positions

13 in that period of time?

14 A In '78 and '79 I was Manager of Environmental

15 Sciences for Monsanto Industrial Chemicals Company. In

16 19--, early 1980, I was made Manager of Product Acceptability

17 for the plasticizers operations of Monsanto, and then early

18 this year I assumed the present responsibilities.

19 Q Now in '78 did you have any responsibility

20 with respect to testing chemicals produced at the Krummrich

21 plant for various, well, for the makeup of those chemicals?

22 A I was in an administrative capacity at that

23 time, supervising the individuals in the laboratory who

24 did some of the testing of those products.

25 Q Okay, and I take it then you yourself did

1 not personally conduct any tests on any of the products?

2 A That is correct.

3 Q But you would give orders to those under you
4 to do the testing?

5 A Yes.

6 Q And a couple of those under you at that time
7 would be Orville Hicks and Robert Kaley?

8 A That is correct.

9 Q Was there any practice or policy so far as
10 you know in '77 and '78 to test the orthochlorophenol crude
11 produced at the Krummrich plant for the presence of TCDD's?

12 A To my knowledge, there had been some tests
13 run, but it was not a routine analysis.

14 Q Do you know, again to your knowledge, what
15 was the occasion for those tests that were run?

16 A I believe it was just routine, what we might
17 call routine screening.

18 Q Did you supervise those tests?

19 A Not directly.

20 Q All right, but it was done under your juris-
21 diction?

22 A Yes.

23 Q All right. In your department so to speak,
24 you're over at Creve Coeur, aren't you?

25 A Yes.

1 Q Or were at that time?

2 A Yes, I was and still am.

3 Q Still am, all right. The analysis that takes
4 place in the plant for the chemical constituency of the tank
5 cars that are shipped out is not conducted under your juris-
6 diction or supervision or in your department, isn't that
7 correct, sir, and again I'm referring to '78 and '79 now?

8 A That is correct.

9 Q They have their own devices there that tell
10 them the makeup of the chemicals produced, correct?

11 A They have their own laboratory, yes.

12 Q All right. They can't go down to the levels
13 of detection of various isomers for instance of chlorinated
14 phenols that you were capable of going down to in '78 and
15 '79, isn't that correct?

16 A I'm not aware of what their current capability
17 is in that area.

18 Q No, no. I meant at that time.

19 A Oh, at that time?

20 Q Yes. In '78 and '79.

21 A To the best of my knowledge they didn't have
22 that capability at that time.

23 Q All right, but your laboratory had a greater
24 capacity to detect these isomers or had some capacity to
25 detect these isomers versus no capacity at the plant, isn't

1 that correct, at that time?

2 A I'm, would you repeat the question, please?

3 Q Sure. Your laboratory is more sophisticated
4 and refined than the laboratory that's at the Krummrich
5 plant, is it not?

6 A Speaking for --

7 Q At that time, yes, in '78 and '79.

8 A Yes, at that time, yes.

9 Q So if there is to be any checking or testing
10 of the chemicals done for TCDD's in the products produced
11 at that plant, it would have fallen upon you or that is
12 your laboratory to perform those tests rather than the
13 laboratory at the Krummrich plant, isn't that correct?

14 A Not entirely.

15 Q All right. Explain the difference to me
16 there, please.

17 A There was some capability in the plant at
18 that time to perform this type of analyses, and they were
19 doing some checking of their samples during that time.

20 Q What could they check for in '78, how
21 sophisticated were they?

22 A It's hard to relate that to a question in
23 lay terms.

24 Q Well, let's talk about TCDD's. You said they
25 had some capacity in that respect, just tell me what they

1 could find.

2 MR. MUSGRAVE: In a particular --

3 MR. CARR: In '78.

4 MR. MUSGRAVE: In what though,
5 TCDD's?

6 MR. CARR: In anything. He said
7 they did have some capacity there, and I want to find out
8 what the capacity was.

9 MR. MUSGRAVE: That may be the
10 problem.

11 A They made a number of products at the Krumrich
12 plant including some higher chlorinated phenolic materials,
13 and the laboratory did have some capability with gas chroma-
14 tography to monitor higher chlorinated dioxins in some of
15 those higher chlorinated phenolic products.

16 Q And these higher chlorinated phenolic products
17 would be what, the 2,4-D in Santophin?

18 A No. The name of the product that I'm aware
19 of that had the most work done on it was pentachlorophenol.

20 Q All right, and they had the ability to detect
21 certain levels of TCDD in pentachlorophenol?

22 A Had there been high levels present.

23 Q In '78?

24 A Had there been high levels present, I think
25 they would have had that capability.

1 Q What levels, when you say high levels, parts
2 per thousand, parts per million?

3 A No. In the parts per million range, but at
4 this time I would be unable to estimate just where in the
5 parts per million range.

6 Q Okay. They couldn't go down then to parts
7 per billion?

8 A I don't believe so.

9 Q In '78 did you have, and by you I mean your
10 laboratory that you were working in or working over, did
11 you have the capacity to detect TCDD at levels of parts
12 per billion?

13 A The levels that I supervised did have that
14 capability.

15 Q And what capability was that, at what level
16 could you go?

17 A Approximately ten parts per billion.

18 Q All right. You, of course, have got the lab
19 books that are, I think are produced here, and would all,
20 I've asked for '78 so I hope they're here, would your lab
21 book reveal the testing that you did for TCDD's in the year
22 '78, if you did test any of those products from that plant
23 for TCDD's?

24 A When you say, when you use the word, you, were
25 you referring to me, me personally?

1 Q You, yes, your laboratory.

2 A I don't know that I had a lab booklet at that

3 time.

4 Q No. I said your laboratory. I didn't say

5 your book.

6 A Well ---

7 Q The books in your laboratory.

8 A Well, our normal policy was for the scientists

9 who are involved in a particular study at the bench, as we

10 call it, those scientists would make their notations.

11 Q In a book?

12 A In their laboratory notebooks. I don't know

13 what laboratory notebooks you have here.

14 Q Well, I don't know either, but my question

15 is if whatever testing was done for TCDD in the chemicals

16 at the Krummrich plant that were produced at the Krummrich

17 plant that were done by the laboratory under your supervision,

18 those results would be in these laboratory books kept by your

19 scientists, would they not, sir?

20 A That was our normal policy.

21 Q All right, well, do you know of any occasion

22 when you would not have followed the normal policy?

23 A No, I don't.

24 Q All right, so it was your regular and unveering

25 policy to keep these tests and the record of these tests in

1 these lab books, is that correct, sir?

2 A It was our policy for any project that came
3 into us as a project, to keep the results of those analyses
4 in a laboratory notebook.

5 Q Well, would there be something that would come
6 to you other than as a project?

7 A Conceivably some scientists may have been doing
8 some method development work at some time, which he may not
9 have logged into a notebook. What I'm trying to clarify for
10 you is I can't absolutely certify that every bit of work
11 that was done might have been logged into someone's notebook.
12 I'm also not aware of anything that wasn't, if that helps
13 you any.

14 Q All right.

15 A I'm not trying to deliberately be evasive.

16 Q What you're saying is they're supposed to keep
17 it in the lab book, it's the practice to put it in the lab
18 book and so far as you have any knowledge today, all testing
19 that was done on products produced at the Krummrich plant,
20 and that were tested in '78, are contained in these lab
21 books, is that correct, sir?

22 A Would you restate that, please?

23 MR. CARR: No. I'll resay it.

24 MR. MUSGRAVE: She can reread it.

25 (Whereupon the question was read

back by the Reporter.)

A So far as I know.

Q Yes. Do you know whether or not any level of TCDD was found in orthochlorophenol crude in 1978?

A I don't, I don't --

Q By your laboratory.

A I don't recall our laboratory finding any TCDD in 1978.

Q All right. Was there any laboratory in '78 owned by Monsanto, wherever it might be, that had a greater ability or a better or more refined, sophisticated ability to detect TCDD's and the various isomers of those TCDD's in orthochlorophenol crude in 1978 other than the laboratory over which you had supervision?

A As far as I know, we had the best capability within Monsanto at that time.

Q All right, and that would include the Dayton laboratory?

A That is correct.

Q All right. Now I've asked other witnesses of this, and I'm not going to go into it at any detail unless there's some variance. You and Orville Hicks and Kaley and P.R. Michael jointly participated in the publication of an article called Determination of Trace Amounts of Chlorodibenzo-P-dioxins and Chlorodibenzofurans in Technical Grade Penta-

1 chlorophenol in '77. Do you recall that, sir?

2 A Yes, I do.

3 Q All right. Is there anything about that method
4 of detection or process that you went through as published
5 in that document that would not be true or not be correct
6 to the best of your knowledge today?

7 A I'm sorry. Could you repeat that question
8 for me, please.

9 Q I'll ask it a different way. Is there anything
10 in that article that is different from what you know the facts
11 to be today?

12 A No. That, that method was a good and valid
13 method at the time.

14 Q All right, and, of course, the article just
15 deals with pentachlorophenol, or that's the subject of it,
16 but you knew then and know now that that method could be
17 used to detect levels in orthochlorophenol for instance as
18 well as pentachlorophenols, isn't that correct, sir?

19 MR. MUSGRAVE: Levels of what?

20 MR. CARR: Of trace amounts of
21 chlorodibenzo-P-dioxins and chlorodibenzofurans.

22 A My --

23 MR. MUSGRAVE: Sure. Go ahead. Do
24 you understand the question?

25 A I believe I do, yes. At that time I don't

1 believe the method had been tested on orthochlorophenol
2 crude; but subsequent developments did indeed let us verify
3 that that same methodology could be used for other chloro-
4 phenols, including orthochlorophenol crude, with only very
5 minor modifications.

6 Q And in fact you used it for testing other
7 chlorinated phenols subsequent to '77, did you not, sir?

8 A My laboratory did, yes.

9 Q All right, and if you had thought about it
10 or had been asked to test orthochlorophenol crude or some
11 other product using this method in '77, you could have
12 modified it, these minor modifications that you've mentioned,
13 and others have mentioned before you, you could have done
14 that at that time, if you'd been called upon to do it?

15 A I believe we could have, yes.

16 Q The point that I'm making is that this method,
17 you knew then could be adapted or modified to be used on
18 other products in addition to technical grade pentachlorophenol,
19 did you not, sir?

20 A We suspected that it could be, yes.

21 Q And it would have been a simple matter to find
22 out if your belief or suspicion was true, would it not, sir,
23 simply by doing it?

24 A By doing it, although I wouldn't agree that
25 it is a simple matter because we have method grade procedures

1 we go through that really aren't simple, they're complicated.

2 Q Did you get a request by anybody before 1979,
3 I mean anybody in Monsanto, to test, to use your method on
4 orthochlorophenol crude for the presence of trace amounts of
5 chlorodibenzo-P-dioxins and chlorodibenzofurans?

6 A It's hard for me to pinpoint the exact time;
7 but if I could answer the question in this way, prior to
8 the Sturgeon incident, we had measured, we had looked for,
9 we had analyzed orthochlorophenol crude for dibenzo-dioxin.

10 Q Using this method published in July of '77?

11 A Using that basic method. There may have been
12 some minor modifications, but the basic method.

13 Q So anyway you had satisfied yourself before
14 1979 that the method could be used for orthochlorophenol
15 crude then?

16 A Yes.

17 Q All right, and you had in fact tested ortho-
18 chlorophenol crude then before January the 10th of '79 for
19 these trace amounts, had you not?

20 A Yes.

21 Q All right, but only on a, if I understand you
22 correctly, on an isolated instance or only for your own
23 information. Well, let me ask it a different way. Under
24 what circumstances did you test orthochlorophenol before '79?

25 A We were tested, we were requested to test a

1 few samples on a nonroutine basis.

2 Q For what purpose and by whom?

3 A For the presence of chlorinated dibenzo-
4 dioxins by someone either in the business area or the
5 plant, I don't recall at this time who the requestor was.

6 Q Do you recall whether or not the request was
7 subsequent to a request of a customer that it be done?

8 A As far as I know, it was not at the request
9 of a customer, but I would not always be certain of that.

10 Q All right. It wouldn't be important to you
11 to know whether or not it was at the request of a customer
12 or at the request of a higher up in the plant or for a plant
13 manager or if anything, it's just important to you that the
14 request was made?

15 A That is correct. We were sometimes not aware
16 of the basic reason why we were performing a given test.

17 Q Did your laboratory in 1978 have the capacity
18 to determine the presence of 2,4,5-trichlorophenol in the
19 products manufactured at or produced at the Krummrich plant?

20 A We had no demonstrated capacity to do that.
21 Theoretically it might have been possible, but we had no
22 established methodology for doing that to the best of my
23 recollection.

24 Q Could the method that you used for the TCDD's
25 be used to establish the presence or absence of 2,4,5-

1 trichlorophenol?

2 A No.

3 Q Did no one ever ask you to test or to find
4 a method to discover whether or not 2,4,5-trichlorophenol
5 was in any of your products?

6 A I don't --

7 Q At the Krummrich plant.

8 A I don't recall having been asked to do that.

9 Q If you had been asked, do you believe that
10 your people had the capacity to do it?

11 A I believe we could have developed a method
12 to do it. As I mentioned previously, we did not have to the
13 best of my knowledge, we did not have an existing method to
14 do that.

15 Q Could you explain to me this method that you
16 would have developed, what would you have had to do?

17 A Most likely one would want to use gas chroma-
18 tography for that type of an analysis because gas chroma-
19 tography with, with any of the various detectors is more
20 sensitive than other types of analytical techniques; but
21 before the chlorophenol product per se could have been
22 routed through a gas chromatograph, it would have been,
23 had to have been derivatized. It would have to have been
24 changed in form from the phenol to some sort of an ester
25 and so a process for forming a derivative would have had

1 to have been developed, and then this process would have
2 had to have been validated by running a number of known
3 samples preferably spiked into the median of interest and
4 determine the recovery demonstrated, adequate recovery of
5 that procedure, again using the analytical measuring device,
6 the gas chromatograph or gas chromatograph spectrometer,
7 and then the laboratory would be ready to analyze some
8 samples.

9 Q All right. Did your laboratory and your
10 personnel have the capacity to do that which you just
11 described in 1978 or '77?

12 A I believe we could have performed that
13 analysis.

14 Q All right. Is it a fair statement to say
15 that the method that you published in 1977 relating to
16 trace amounts of these chlorodibenzodifurans and dioxins
17 was a more sophisticated or complicated or involved method
18 than the method you've just described to detect the presence
19 of 2,4,5-trichlorophenol?

20 A I would describe the method as being of
21 roughly comparable complexity.

22 Q Why is that, Dr. Misure? I understand that
23 the isomers, that is these TCDD's are isomers that are in
24 the 2,4,5-trichlorophenol, that is it is an impurity, if
25 you will, in the 2,4,5-trichlorophenol. It is --

1 MR. MUSGRAVE: Which isomers?

2 A What is an impurity?

3 Q These TCDD's that we're talking about that
4 you can detect the presence of, 2,4,5-trichlorophenol, my
5 understanding is a precursor to some of these dioxins.

6 A I think 2,4,5-trichlorophenol is a precursor
7 to some of the dioxins, but not all of them.

8 Q All right, I accept that; but if it is a
9 precursor to some of the dioxins and you can detect by your
10 method these TCDD's that have come about that were first
11 2,4,5 or trichlorophenol rather, wouldn't it be simpler to
12 detect the precursor to the TCDD's than it would be to
13 detect the TCDD's themselves?

14 A As I mentioned earlier in terms of the analytical
15 complexity, it's about equal.

16 Q All right. Well, that's what I want you to
17 explain to me, if you can. I may not be capable of under-
18 standing it. Why it's about the same, even though the 2,4,5-
19 trichlorophenol is the precursor to some of these TCDD's
20 that you had the capacity to detect?

21 A Well, as I mentioned earlier, when I described
22 what we would have to do in order to develop a method, the
23 first thing we would have to do in measuring 2,4,5-trichloro-
24 phenol is to put, is to convert that chemical into a form
25 in which it would go through a gas chromatograph; and that

1 conversion is not a simple step, that conversion requires
2 one to quantitatively chemically convert the material into
3 an ester and to get that, to get a trace level of a chloro-
4 phenol in a much larger amount of chlorophenol matrix to
5 convert into an ester requires some degree of sophistication.

6 Q Okay, but in the final analysis, it's your
7 belief that your laboratory had the sophistication necessary
8 to do that which you've described?

9 A I believe.

10 Q In '78?

11 A I believe we could have developed a method
12 to do that.

13 Q All right, and no one ever asked you to develop
14 the method to do that?

15 A No one asked us to develop that method.

16 Q All right.

17 A Presumably because there was no reason to
18 suspect the presence of 2,4,5-trichlorophenol.

19 Q Well, of course, that's speculation on your
20 part, and my question is simply put.

21 A I wouldn't call that speculation. I mean that's
22 based on knowledge of chemistry.

23 Q Well, you do know now, don't you, Dr. Mieux,
24 that 2,4,5-trichlorophenol was found in the tank car that
25 was involved in this incident?

1 A I know that by hearsay.

2 Q And by hearsay you mean that you read a
3 document that states that?

4 A I don't believe I've read a document, but I've
5 heard other people make that remark.

6 Q And have you accepted that it's true what
7 these other people have told you?

8 A I have no basis either to accept it or reject
9 it.

10 Q All right. Who was it that told you?

11 A I don't recall.

12 Q How recent were you told that?

13 A I don't recall.

14 Q You don't recall that either?

15 A It's been years.

16 Q Okay. Then it's not been recently that you
17 were told that?

18 A I don't, it may have come up again recently.
19 I don't recall a specific instance.

20 Q Now did you have anything to do with analyzing
21 the reserve samples from the tank car that spilled at Sturgeon
22 for the presence of TCDD's after the spill occurred?

23 A The laboratory that I supervised performed that
24 analysis.

25 Q All right, and was it under your supervision

1 that the analysis was performed which discovered there were
2 37 parts per billion of TCDD in that tank car?

3 A We discovered that there appeared to be
4 tetrachlorodibenzo dioxins in that reserved sample.

5 Q And is your answer to my question that you
6 did supervise that process?

7 A I, my laboratory did it. I was not in the
8 laboratory directly supervising.

9 Q Did you have anything to do with attempting
10 to or to make changes in the manufacturing process at the
11 Krummrich plant to, not just for orthochlorophenol, but for
12 any chemical there to reduce or to eliminate the creation
13 of these TCDD's that were found in the products from the
14 plant in '79, '80 and '81?

15 A Well, our role was an analytical support
16 group as opposed to a process, chemistry group.

17 Q Well, did you have a role to play in that,
18 Dr. Misure?

19 A We monitored some of the work that was going
20 on in the process.

21 Q And didn't you make suggestions as to how to
22 eliminate TCDD?

23 A I don't recall making any recommendations
24 on the elimination, no. We supplied the data that others
25 might have used to make those decisions.

1 Q Did you have the method worked out in 1979
2 to prove or disprove the presence of 2,4,5-trichlorophenol
3 in that tank car reserved sample?

4 A I believe we've covered that already, sir,
5 and I believe my answer to that question was, no, we did
6 not have a developed method for doing that.

7 Q All right. Is there any way then of making
8 a statement that, or coming to a conclusion definitely that
9 that tank car did not contain 2,4,5-trichlorophenol?

10 A The normal --

11 Q In February, '79.

12 A The chemical processes that were involved in
13 manufacturing the various chlorophenols in our department
14 at Krummrich would not be expected to yield appreciable
15 quantities of the 2,4,5-trichlorophenol isomer.

16 Q Well, I won't quarrel with that; but it's
17 not, it may not be expected to yield appreciable quantities
18 of that particular isomer, and I didn't ask you that, did I,
19 sir?

20 A I would have to have the question repeated
21 to know exactly what you are asking.

22 Q Let me ask you again specifically. Could you
23 say in February of 1979 definitely and with certainty that
24 there was no 2,4,5-trichlorophenol in that tank car?

25 A I couldn't comment one way or the other, no,

1 not at that time, I would not know.

2 Q Then your answer to my question is that you
3 could not know it, did not know it and would not say that
4 there was definitely no 2,4,5-trichlorophenol in that tank
5 car, is that correct, Dr. Mieure?

6 A I believe that's correct.

7 Q All right, and the reason you could not say
8 that is because you had not the methodology worked out at
9 that time to test that tank car for the presence or absence
10 of 2,4,5-trichlorophenol, is that correct, sir?

11 A Our laboratory did not have that capability.

12 Q Did your laboratory, any laboratory at
13 Monsanto have that capability to your knowledge at that
14 time in February of '79?

15 A I don't know.

16 Q Are you saying you don't know now or you
17 didn't know then?

18 A I don't know either time.

19 Q Are you familiar with the capacities of these
20 various laboratories?

21 A The plant laboratory had some capacity for
22 measuring chlorophenol.

23 Q Well, did they have a capacity to detect whether
24 there was or was not 2,4,5-trichlorophenol in that car?

25 A I don't know.

1 Q Why don't you know that, Dr. Mieure?

2 A That's not a subject matter that a person in
3 my responsibilities would delve into, as we defined earlier
4 in our discussion, Monsanto had various laboratories at
5 various locations, and I was responsible for one laboratory.

6 MR. CARR: Could you mark that
7 please for me.

8 (Whereupon Mieure Deposition Exhibit
9 No. 1 was marked for identification
10 by the Reporter.)

11 Q And, Dr. Mieure, your initials are J.P., are
12 they not?

13 A That is correct.

14 Q Could you look at what now has been marked
15 Plaintiffs' Exhibit.

16 A Okay.

17 Q Do you know whose handwriting that is?

18 A That appears to be my handwriting.

19 Q All right, and your initials are also there,
20 are they not, J.P.M.?

21 A That's correct.

22 Q And did you arrive at the conclusion as stated
23 in that exhibit that it's definitely not 2,4,6-trichlorophenol?

24 A This appears to be the record of a phone
25 conversation between myself and Bob Cleopfer of the EPA.

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Q Yes.

A And this appears to be a record of an analysis performed by the Environmental Protection Agency.

Q And not your analysis?

A That's correct.

Q All right. Thank you, and that's your best memory of it at that time, correct?

A That is correct.

MR. MUSGRAVE: What's the exhibit number, please?

MR. CARR: That would be one.

Q Now, Dr. Mieure, you testified earlier that the manufacturing process would not be expected to create appreciable quantities of 2,4,5-trichlorophenol. Do you recall that, sir?

A I believe that's the remark, yes.

Q All right. When you say appreciable quantities of 2,4,5-trichlorophenol, what do you mean by that, could you break that down for me?

A I suppose I meant detectable quantities, that which would be detectable by our analytical methodology.

Q And what level would that be then at that time?

A Which material were we talking about when we said appreciable?

1 Q 2,4,5-trichlorophenol.

2 A Well, at that time as I mentioned, I didn't
3 methodology for that, so it would be difficult for me to
4 stipulate just what that methodology would be capable of.

5 Q Well, would your knowledge of the chemistry
6 involved allow you to come to the conclusion that there
7 could be some amounts of 2,4,5-trichlorophenol created in
8 the manufacturing process?

9 A Well, as I stated earlier, I would suspect
10 any such formation to be very minimal.

11 Q But my question is then, it does follow that
12 you would expect some formation to be there?

13 A Not necessarily.

14 Q Well, would you expect some to be there, you
15 said you wouldn't expect appreciable amounts, what is there
16 in the manufacturing process or involved in this situation
17 that would lead to the formation of any 2,4,5-trichlorophenol
18 in your knowledge as an organic chemist?

19 A Well, I'm an analytical chemist as opposed
20 to an organic chemist.

21 Q Okay.

22 A According to my knowledge, there would not
23 be any route that was expected to lead to the formation of
24 2,4,5-trichlorophenol.

25 Q Well then, why did you say you wouldn't expect

1 appreciable amounts to be there, which indicates to me that
2 you would expect some amounts to be there?

3 A Analytical chemists tend to think in terms
4 of what they can detect; and if we can detect it, I guess
5 we define it as depreciable. I would not expect 2,4,5-
6 trichlorophenol to be present in that process.

7 Q And why not, you're chlorinating phenols,
8 aren't you?

9 A But that chlorination tends to go very heavily
10 towards the ortho and para substitution positions.

11 Q Well, no quarrel with that, tends to, but
12 doesn't always, does it, sir?

13 A I can't comment on that.

14 Q You can't comment because you have, that's
15 outside your sphere of expertise?

16 A That's correct.

17 Q And is it fair to say that you don't know
18 whether or not the manufacturing process would or would
19 not create 2,4,5-trichlorophenol, is that correct, sir?

20 A I don't know it with one hundred percent
21 certainty, but I have a strong scientific knowledge that
22 would tend to make me believe that it wouldn't be formed.

23 Q Okay, and why is that, sir?

24 A Well, as I mentioned earlier because the
25 substitution goes to the ortho and para positions.

1 Q But not always, didn't you say that, sir?

2 A I don't know if it always goes or not.

3 Q All right. Now is there any different method
4 involved in detecting the presence of 2,4,6-trichlorophenol
5 as opposed to detecting 2,4,5-trichlorophenol?

6 A I would imagine the basic methodology would
7 be the same.

8 Q All right, so if you had a methodology worked
9 out for discovering the quantities of 2,4,6-trichlorophenol,
10 you could discover similar quantities of 2,4,5-trichlorophenol
11 using the same analytical method?

12 A I would expect that with minor modification and
13 method validation that one could determine that.

14 Q All right. Did you, Dr. Misure, have anything
15 to do with testing any reserve samples from the tank car
16 in question other than the testing that was done in early
17 February, 1979?

18 A I don't recall the exact dates that we did
19 our testing, but I only recall the one series that I believe
20 we covered in our earlier discussions.

21 Q All right, and that would be the one, we've
22 had it identified by another witness where you reported
23 37 parts per billion of TCDD, correct, sir?

24 A We reported something in the 30 to 40 part
25 per billion range.

1 Q Yes, right; and to the best of your knowledge
2 as you're sitting here now, you had nothing to do with any
3 other testing of the tank car reserve samples subsequent
4 to that test?

5 A I don't recall any.

6 Q Is there any reason that you know of why you
7 wouldn't recall it if you had something to do with such
8 testing?

9 A No.

10 Q Now as far as the test results is concerned
11 and the reporting of those test results of this sample
12 that you all did in February, what was it, the eighth I
13 think it was or the ninth, whatever the date, let me get
14 a precise date for that.

15 Well, let's just have a broad
16 inclusive period from February the 7th, the testing and
17 analysis of this tank car reserved sample from the Sturgeon
18 incident from February the 7th, '79, through February the
19 15th, '79. Did you or would you have any right to change
20 any conclusion reached by those persons conducting that
21 analysis of that tank car sample?

22 A Would I have any?

23 Q Did you have the authority, did you or would
24 you, did you and could you have the authority to change those
25 results?

1 A As far as I know I didn't have the authority
2 to change the results and I don't recall changing any results
3 or conclusions.

4 Q Well, when you say you don't recall, that
5 bothers me. If you don't have the authority to change
6 any results, is there any circumstances under which you
7 would have done it?

8 A If somehow I knew a result to be wrong, I
9 suppose.

10 Q I'm talking about this specific tank car
11 sampling, did you change in any fashion or method whatsoever
12 any conclusions reached by the persons conducting the
13 analysis?

14 A Not that I recall.

15 Q Now when you say not that you recall, that
16 disturbs me.

17 A You're asking me to remember something that
18 happened five years ago.

19 Q Well, something of great consequence. It
20 would be of great consequence, wouldn't it, Dr. Mieure,
21 if you changed the results of an analysis made by people
22 working under you that you had nothing to do with the
23 testing yourself?

24 A As we indicated since if I knew something
25 to be incorrect, I would change it.

1 Q Well, did you know something to be incorrect?

2 A No.

3 Q In the testing?

4 A No.

5 Q And as far as you know, did you or anybody

6 working with you or alongside of you, under you or above

7 you change any of the test results or conclusions reached

8 from these results from the testing that took place from

9 February the 6th or the 7th, 1979, through February the 15th,

10 1979?

11 A No.

12 Q Did you, Dr. Mieure, ever advise anybody, and

13 by anybody I mean anybody in the organization of Monsanto

14 or outside, that the isomer detected, the 37 parts per

15 billion was not 2,3,7,8-TCDD?

16 A I'd have to see the analytical reports.

17 Q To know whether or not you told anybody that?

18 A Sure. I can't remember what I told people

19 five years ago.

20 Q Well, did you have anything to do with pre-

21 paring the analytical reports?

22 A I'm sure I did.

23 Q Wouldn't you be accredited with authorship

24 if you had had something to do with those reports?

25 A Well, I was in a supervisor responsibility

1 whereby I would have approval over various reports.

2 Q Well, if you had changed it --

3 A I did not change any reports to the best of
4 my knowledge.

5 Q Would you have any knowledge as to whether or
6 not the isomers in that tank car was 2,3,7,8-TCDD other
7 than what would be reported to you by the chemist doing
8 the analysis of the sample?

9 A I would not.

10 Q All right. Would anybody outside of, now as
11 I understand what's been told to me, is that Hicks and Kaley
12 were the ones that performed this particular test on this
13 reserved sample from the tank car in question?

14 A That's correct.

15 Q And that it was done under your supervision,
16 broad supervision, but not in the laboratory supervision?

17 A That's correct.

18 Q All right. Was there anybody outside of you
19 three to your knowledge that had anything to do with that
20 test, that testing and the reporting of those tests or
21 testing of the reserve sample of that GATX car?

22 A In terms of the Monsanto reporting of it, no,
23 we, that was our responsibility.

24 Q All right. Would it be fair to say that under
25 any circumstance where you felt compelled to change the

1 results of an analysis or the conclusion reached on that
2 analysis, that you would be obligated to identify the changes
3 made and that you made the changes by some initialing or
4 something of the sort?

5 A I don't recall ever having to make any changes
6 to have developed a procedure whereby we would certify how
7 the changes were made.

8 Q Well, assume hypothetically that you found an
9 error in a report made by one of your laboratory chemists.
10 All right. You determined, Dr. Misure determined that this
11 was a faulty conclusion, and it needed to be changed for the
12 purpose of scientific accuracy. Assume that for a moment.
13 If you made such a change, would you not as a scientist
14 identify the change that you made and identify yourself as
15 the person making the change?

16 A That would depend upon the type of changes
17 that were made. If, if a word was misspelled, for example,
18 I don't think I would make a big deal out of it or if a
19 temperature were reported incorrectly.

20 Q Well, I agree; and if there was, it would have
21 to be a change of magnitude of some importance; but if you
22 did make a change of some magnitude or importance, as a
23 scientist you absolutely would be obligated to identify
24 the change you were making and the fact that you made the
25 change?

1 STATE OF ILLINOIS)
2) SS
3 COUNTY OF MADISON)

4 I, KAREN J. HAYS, a Notary Public within and
5 for the County of Madison, State of Illinois, do hereby
6 certify that pursuant to stipulation that there appeared
7 before me on December 21, 1983, at the law offices of
8 Coburn, Croft & Putzel, One Mercantile Center, Suite 2900,
9 St. Louis, Missouri, DR. JAMES P. MIEURE, who was first
10 duly sworn to me to testify to the whole truth of his
11 knowledge touching the matter in controversy aforesaid,
12 so far as he should be interrogated concerning the same;
13 that he was examined, and his examination was taken down
14 in shorthand by me and afterwards transcribed upon the
15 typewriter, and his deposition is herewith returned.

16
17 IN WITNESS WHEREOF, I have hereunto set
18 my hand and affixed my notarial seal on this _____
19 day of _____, 1983.

20
21
22 _____
23 Notary Public within and
24 for the County of Madison,
25 in the State of Illinois.