

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

I N D E X

PAGES

GREETING BY HEARING OFFICER..... 4-13
OPENING STATEMENT BY MS. GEVING..... 13-15
QUESTIONS AND ANSWERS BY IPCB AND IEPA..... 15-159
CLOSING COMMENTS BY HEARING OFFICER..... 160-162

E X H I B I T S

Marked for

Identification

DOD Exhibit No. 1 31
IEPA Group Exhibit No. 1 89

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

A P P E A R A N C E S :

HEARING TAKEN BEFORE :

ILLINOIS POLLUTION CONTROL BOARD
100 West Randolph Street
Room 9-040
Chicago, Illinois 60601
(312) 814-3620
BY: MS. AMY L. JACKSON
HEARING OFFICER

ILLINOIS POLLUTION CONTROL BOARD MEMBERS PRESENT :

MS. AMY L. JACKSON
MR. NICHOLAS J. MELAS
MS. MARILI McFAWN
MS. ALISA LIU
MS. ELANA Z. KEZELIS

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY MEMBERS
PRESENT :

MS. KIMBERLY A. GEVING
MR. LAWRENCE W. EASTEP
MR. GARY P. KING
MR. JAMES PATRICK O'BRIEN
MR. DOUGLAS W. CLAY
DR. THOMAS C. HORNSHAW
MS. CONNIE SULLINGER
MS. TRACEY E. VIRGIN HURLEY
MR. RICHARD P. COBB
MR. JOHN SHERRILL
MR. CHRISTOPHER L. NICKELL

OTHER AUDIENCE MEMBERS WERE PRESENT AT THE HEARING BUT
NOT LISTED ON THIS APPEARANCE PAGE

L.A. REPORTING
(312) 419-9292

1 THE HEARING OFFICER: Good morning, everyone. My
2 name is Amy Jackson, and I'm the attorney assistant to
3 the board member Elana Kezelis. And I'm the hearing
4 officer for this proceeding.

5 I would like to welcome you all to this
6 hearing held by the Illinois Pollution Control Board in
7 the matter of Proposed Amendments To the Tiered
8 Approach To Corrective Action Objectives, otherwise
9 known as TACO, found at 35 Illinois Administrative Code
10 742.

11 Present today on behalf of the Board are
12 board members Elana Kezelis.

13 MS. KEZELIS: Good morning.

14 THE HEARING OFFICER: Marili McFawn.

15 MS. McFAWN: Good morning. Nice to see you all.

16 THE HEARING OFFICER: And Nicholas Melas.

17 MR. MELAS: Good morning.

18 THE HEARING OFFICER: Also present and immediately
19 to my right is Alisa Liu from the Board's technical
20 unit. The Board members and Alisa will have questions
21 for the presenters today.

22 As many of you know, the Board on July 27th,
23 2000, adopted First Notice Opinions and Orders that
24 effectively split this proceeding into two Subdockets,

L.A. REPORTING
(312) 419-9292

2 Subdocket A contains proposed amendments to a
3 couple of sections in Subpart J dealing with
4 institutional controls, specifically those sections
5 that involve the addition of the Environmental Land Use
6 Controls, or ELUCs, E-L-U-C. Subdocket B basically
7 contains all of the other proposed amendments to TACO.

8 On the table near the entrance are additional
9 copies of the testimony, the prefiled testimony before
10 today that was submitted by the Illinois Environmental
11 Protection Agency and by Mr. Gary Zolyak of the
12 Department of Defense.

13 Also on the table are extra copies of the
14 First Notice Opinions and Orders issued by the Board in
15 both Subdockets A and B.

16 Finally sign-up sheets are also provided for
17 the notice and service list for this proceeding. Those
18 persons on the notice list will receive copies of all
19 board opinions and orders as well as board hearing
20 officer orders.

21 Those persons on the service list, in
22 addition to receiving those board documents, will also
23 receive documents filed by others on the service list.
24 That might include such things as written public

L.A. REPORTING
(312) 419-9292

1 comments in this matter.

2 If you are on the service list, you have the
3 additional obligation of serving others on the service
4 list in addition to serving the Board and the hearing
5 officer in this matter.

6 The Environmental Protection Agency filed a
7 proposal for rulemaking on May 15th, 2000. The Board
8 accepted this matter for hearing at a board meeting on
9 May 18th, 2000.

10 As previously stated, the Board adopted First
11 Notice Opinions and Orders and each of the Subdockets
12 on July 27th of this year.

13 At today's hearing the Board will hear
14 testimony from the Illinois Environmental Protection
15 Agency and other interested persons as well as any
16 members of the public who are present today and would
17 like to make comment.

18 Three other days of hearing are currently
19 scheduled in this matter. The next hearings will be
20 held in Springfield on September 11th and 12th.

21 While we currently have September 22nd set
22 aside as the final day of hearing, if necessary a
23 supplemental notice of hearing will be issued on Monday
24 of next week, August 28th, that will add an additional

L.A. REPORTING
(312) 419-9292

7

1 day of hearing to the schedule.

2 That additional day is September 21st, 2000.

3 The hearing will begin at approximately 12:00 noon
4 immediately following a board hearing on that day. The
5 hearing will be here in Chicago in this room.

6 The purpose of that hearing will be to take
7 testimony regarding the Board's request pursuant to
8 Section 27(b)(1) of the Environmental Protection Act,
9 that request being that the Department of Commerce and
10 Community Affairs conduct an economic impact study for
11 this rulemaking.

12 At this time it appears as if the Department
13 of Commerce and Community Affairs will not be
14 conducting an economic impact study in this rulemaking.
15 If additional substantive testimony is needed, that
16 hearing will be followed with an additional hearing on
17 the September 22nd date that is already scheduled.

18 This hearing is governed by the Board's
19 procedural rules for regulatory proceedings. All
20 information that is relevant and not repetitious or
21 privileged will be admitted.

22 All witnesses will be sworn in and subject to
23 cross-questioning. We will first hear testimony today
24 from the Illinois Environmental Protection Agency on

L.A. REPORTING
(312) 419-9292

8

1 the Subdocket A portion of this rulemaking.

2 Following the Agency's presentation, we will

3 take any questions from the board or members of the
4 public present, and then we will allow Mr. Gary Zolyak
5 from the Department of Defense to present his testimony
6 on that subject matter as well.

7 Please note that any questions asked by a
8 board member or a member of the Board's staff today are
9 intended only to help build a complete record in this
10 matter. Questions should not be interpreted as
11 expressing any preconceived notion or bias on the part
12 of the Board.

13 Additionally if any members of the public
14 have questions for the witnesses, I ask that you please
15 raise your hand and wait for me to acknowledge you.

16 Once I have acknowledged you, please state
17 your name and the individual or organization that you
18 are here representing for the court reporter to get
19 that down in the record.

20 Finally, as you can see, we do not plan on
21 using microphones today. So, please, if you are
22 speaking, do your best to keep your voices up. If you
23 have trouble hearing in the back of the room, please
24 feel free to move forward at any time during this

L.A. REPORTING
(312) 419-9292

9

1 process.

2 Do any of the board members have any opening
3 statements that they would like to make?

4 MS. KEZELIS: Thank you, Ms. Hearing Officer.

5 Good morning. Welcome to the Pollution
6 Control Board Hearing on TACO. I only want to say that
7 we really do appreciate all the hard work that the
8 Agency has put into this. And it's clear that there's
9 been a lot of work gone into the prefiled testimony of
10 the agency witnesses.

11 We look forward to hearing from all of you.
12 Thank you.

13 THE HEARING OFFICER: Members McFawn or Melas?

14 MR. MELAS: I have nothing to add.

15 MS. McFAWN: I just want to say hello to those of
16 you that were here for the first TACO set of hearings.
17 Nice to see you all back.

18 And welcome to those that are coming for the
19 first time to the TACO hearings. They're always very
20 interesting and sometimes very detailed. Good luck.

21 THE HEARING OFFICER: Thank you.

22 Before we get started, I do want to note on
23 the record that there were a number of changes that the
24 Board made to the proposed regulatory text before

L.A. REPORTING
(312) 419-9292

10

1 adopting its First Notice Opinion and Order.

2 These changes were made with the consent of
3 the Agency and for the purpose of making sure that the

4 opinion and order that was adopted by the Board would
5 match the official version of the regulatory text that
6 the Board has on its web site and is the same as
7 published by the Secretary of State in the
8 Administrative Code.

9 The Agency attorney, Ms. Geving, asked that I
10 read these changes into the record this morning, and I
11 will do so now. We do have extra copies on the table
12 if you do not have one in front of you and would like
13 to follow along with these changes. They're not real
14 numerous. I'll go through them in a few minutes.

15 The first one is in our Subdocket B proposal.
16 Actually they are all in our Subdocket B First Notice.

17 In the rule text itself, Section
18 742.1020(b)(1), strikeouts and underlines were added
19 to the text to show the word and was being added at the
20 end of that subparagraph.

21 In Section 742.1020(c), strikeouts and
22 underlines showing replacement of old text with new
23 were missing in the Agency proposal, and those
24 strikeouts and underlines were added by the Board.

L.A. REPORTING
(312) 419-9292

11

1 In Section 742.1020(f), F as in Frank, this
2 was an entirely new section proposed by the Agency, but
3 only the Letter F in the proposal was underlined. The
4 Board simply added an underline to the remainder of

5 that subparagraph.

6 Next we turn to the appendices to the
7 Subdocket B Opinion and Order. Appendix A, Table E,
8 under the heading circulatory system, we removed the
9 underlines from styrene and zinc. The underline
10 reference to ingestion only as relating to styrene was
11 retained, as this was actually the only new language
12 being proposed in that section.

13 In Appendix C, Table A, if you look down the
14 right-hand column of the page to Equation No. S, as in
15 Sam, 26, the equation had been changed in the proposal
16 to show centimeters cubed over meters cubed, but the
17 strikeout of the old language and the underline of the
18 new were missing, and so we added that back in.

19 Next in Appendix B, Table A, there were a
20 number of constituents for which new parameters had
21 been or were added, but they were not shown with
22 underlines, and the old parameters that were being
23 replaced were not shown and obviously were not stricken
24 through.

L.A. REPORTING
(312) 419-9292

12

1 We have added the old parameters with
2 strike-throughs and underlined the new proposed
3 parameters, and they were for the following
4 constituents: Benzene, 1,4-Dichlorobenzene, Total

5 Xylenes, and Vanadium.

6 Also in Appendix B, Table B, we made the same
7 sort of changes as I just went through with Appendix B,
8 Table A. The constituents involved this time were
9 Benzene, Total Xylenes, and Vanadium.

10 And finally at various points in Appendix B
11 the parameters for various constituents were shown as,
12 for example, 2.0 followed by a superscript Capital I.
13 The superscript should actually have been a lower
14 case i, and we made those changes throughout.

15 That's it for the changes that the Board
16 actually made to the Agency's proposal. To clarify
17 briefly, the reason we split these two into a
18 Subdocket A and B, the Subdocket A is time driven by
19 statutory deadline, and the Board does need to adopt
20 the proposed amendments in Subdocket A by a definite
21 deadline.

22 If we do need to expedite that docket more
23 than we're already doing, then we will be able to do
24 that with the two Subdockets, and we can keep

L.A. REPORTING
(312) 419-9292

13

1 Subdocket B separate and proceed along with it at a
2 different pace if necessary.

3 However, at this point in the proceedings we
4 are going to proceed with them both simultaneously and
5 hope that we can complete both of them at the same

6 time.

7 If you have any questions about the changes
8 that I just read through, please feel free to give me a
9 call later or see me after the hearing today, I'll be
10 glad to go through them with you.

11 We are about ready to get started. Are there
12 any questions before we do so?

13 With that said, I will ask Kim Geving, the
14 Agency attorney, to introduce her panel of witnesses.
15 And then I will ask the court reporter to please swear
16 them all in and we can begin.

17 MS. GEVING: Good morning. For the record, my
18 name is Kimberly Geving. I'm Assistant Counsel for the
19 Division of Legal Counsel Bureau of Land, Illinois
20 Environmental Protection Agency.

21 I'm going to let all of my witnesses introduc
22 themselves this morning. I believe you have a seating
23 chart.

24 I'd also like to state that on the back table

L.A. REPORTING
(312) 419-9292

14

1 I have also brought copies of the prefiled testimony
2 which includes Errata Sheet No. 1, which Mr. King and
3 Dr. Hornshaw will be summarizing as part of their
4 summaries today.

5 MR. EASTEP: My name is Larry Eastep. I'm with

6 the Illinois EPA Bureau of Land.

7 MR. KING: My name is Gary King. I'm with the
8 Illinois EPA Bureau of Land.

9 MR. CLAY: My name is Doug Clay. I'm with the
10 Illinois EPA Bureau of Land.

11 MR. O'BRIEN: My name is James Patrick O'Brien.
12 I'm with the Office of Chemical Safety, Illinois EPA.

13 DR. HORNSHAW: My name is Tom Hornshaw. I'm also
14 with the Office of Chemical Safety.

15 MR. SHERRILL: My name is John Sherrill. I'm with
16 the Illinois EPA Bureau of Land.

17 MS. SULLINGER: My name is Connie Sullinger. I'm
18 with the Illinois EPA's Office of Chemical Safety.

19 MS. HURLEY: My name is Tracey Hurley. I'm with
20 the Illinois EPA Office of Chemical Safety.

21 MR. NICKELL: My name is Christopher Nickell. I'm
22 with the Illinois EPA Bureau of Land.

23 MR. COBB: My name is Rick Cobb. I'm with the
24 Illinois EPA Bureau of Water.

L.A. REPORTING
(312) 419-9292

15

1 MS. GEVING: One final statement that I had also.
2 It was called to my attention by an attorney in
3 Philadelphia that I had a typographical error in my
4 statement of reasons on Page 10. With reference to
5 MtBE, that should have been 70 ppb instead of 70 ppm.
6 Big difference one letter makes.

7 THE HEARING OFFICER: Ms. Geving, are you ready to
8 proceed?

9 MS. GEVING: We are.

10 THE HEARING OFFICER: Would the court reporter
11 please swear the witnesses.

12 (Witnesses sworn.)

13 THE HEARING OFFICER: Thank you.

14 I believe we're going to begin with Gary King
15 today.

16 MS. GEVING: That's correct. This is on Docket A.

17 MR. KING: Sitting here this morning, I was
18 thinking it was about four years ago when I sat in this
19 room and testified in support of our first TACO
20 proposal.

21 In fact, I think we have a few additions, but
22 everybody who testified in support of that first rule I
23 believe is at the table here today. And Kim of course
24 was the attorney back then. So we have had the

L.A. REPORTING
(312) 419-9292

16

1 advantage, in going through the revision process, of
2 having a lot of consistency as far as the people
3 involved.

4 The Board of course adopted the rule in the
5 summer of '97, and so we've had about three years
6 administering the TACO rule. And anybody who has

7 looked at it realizes it's a very complex rule. It's a
8 very comprehensive rule.

9 But we think as an approach it has been very
10 effective in dealing with the cleanup of sites in the
11 state under the various programs that we administer.
12 It's been effective for project managers within the
13 Agency, and I think it's been effective for those
14 remediation managers outside the Agency who are dealing
15 with projects.

16 We have received -- I personally have
17 received a number of inquiries from other states that
18 have really tried as much as they could within their
19 context to follow the approach that we've used in
20 Illinois because they have seen the successes we've
21 had.

22 And we've seen software developed by outside
23 vendors to take this complex calculation-driven system,
24 put it into something that users could use fairly

L.A. REPORTING
(312) 419-9292

17

1 easily. That's happened.

2 We've done a lot of training both within our
3 organization and outside of our organization to make
4 sure that the rule would be administered properly.

5 And as we sit here today, we do have a number
6 of changes that we put in our proposal, but it's kind
7 of surprising if you think about it. If you think

8 about kind of the complexity of the rule and the size
9 of the rule, we really don't have that many changes.
10 And we certainly don't have any major changes in terms
11 of the fundamental -- that would fundamentally reshape
12 this rule.

13 I think as you hear testimony today and at
14 the other hearings, I think all the things that we're
15 proposing are important. I think there's three things
16 that I think the Board should look for as being kind of
17 the most significant kind of things, at least as from
18 my perspective.

19 One is the issue of the Environmental Land
20 Use Controls, which we have shortened to ELUCs.

21 The second is what we have done with the
22 contaminant arsenic where we've really found a problem
23 as far as background levels in the state that was
24 not -- we recognized it at the time that TACO was

L.A. REPORTING
(312) 419-9292

18

1 originally adopted but were not able to give the kind
2 of -- take the approach that we're taking today.

3 And finally I think the addition of Methyl
4 tertiary-butyl ether, MtBE, as a contaminant of concern
5 for which we have established remediation objectives I
6 think is also an important item.

7 Let me talk first about the ELUC concept.

8 When we adopted the rule or when the rule was adopted
9 by the Board in '97, we had included -- obviously there
10 was the concept of no further remediation letters. And
11 that's really the cornerstone as far as the
12 institutional controls.

13 But we recognize that there would be
14 situations where no further remediation letters would
15 not work as far as an institutional control was
16 concerned because of either the type of program or the
17 type of site. And so we included the option for
18 institutional controls, the use of restrictive
19 covenants, deed restrictions, and negative easements.
20 In my written testimony I referred to those as the
21 common-law instruments.

22 It seemed like a good idea at the time, and
23 it was a good idea because we didn't really know what
24 else to do at that point. But as we've gone about the

L.A. REPORTING
(312) 419-9292

19

1 process of implementing those common-law instruments,
2 we've seen a number of obstacles that are related to
3 the nature of those legal documents that have made it
4 very difficult to use. In fact, it's been more limited
5 than we thought it would be.

6 So we really thought that there was a need to
7 come up with a different type of institutional control
8 that would apply in those situations where no further

9 remediation letters would not apply and would not face
10 the kind of obstacles that were faced with these
11 common-law instruments.

12 We began discussing the concept of
13 Environmental Land Use Controls with the regulated
14 community I believe late '99, probably January of 2000.
15 And we were prepared to go forward without any
16 additional statutory authority because we thought that
17 there was authority for the Board to adopt this type of
18 institutional control under the existing law.

19 However, just to be conservative as to that
20 issue of legal authority, there was legislation
21 introduced. It makes it crystal clear that the Board
22 does in fact have that authority. And that was signed
23 on July 7th of 2000.

24 The part of the rule that describes how the

L.A. REPORTING
(312) 419-9292

20

1 ELUC functions is described in Section 1010 of the
2 regulations. What I would like to do -- and so that's
3 been before the Board. But I would like to go through
4 Errata Sheet No. 1.

5 One of the things that we've always
6 considered as far as implementation of our cleanup
7 programs is that it's an iterative process. And we're
8 constantly looking to improve things.

9 And even as we proposed the ELUC as an
10 instrument, we knew that there were some issues that
11 needed some further discussion. So we had a meeting
12 with the Site Remediation Advisory Committee on
13 June 27th. And as a result of that, we really felt
14 that there needed to be some additional changes, which
15 are reflected in Errata Sheet No. 1.

16 You'll see there's a change on 742.200, and
17 it's just a clarification that a Environmental Land Use
18 Control has to meet the requirements of the
19 regulations.

20 Then if you jump to Page 2, that section is
21 really saying that no further remediation and
22 Environmental Land Use Control, if it meets
23 requirements of this property, it does transfer with
24 the property.

L.A. REPORTING
(312) 419-9292

21

1 We just want to make sure that that is clear
2 that it is transferring with the property as property
3 is sold. There's a little bit of ambiguity in the
4 existing proposal.

5 THE HEARING OFFICER: Mr. King, I'm sorry to
6 interrupt you. I want to clarify. You were talking
7 about the reference to Section 742.1000(d) on Page 2?

8 MR. KING: Yes.

9 THE HEARING OFFICER: Thank you.

10 MR. KING: Excuse me, I'm sorry.

11 On Page 3 we made changes to 1010 Sub A. And
12 really the purpose of those is to make it real clear as
13 to the major situations where we think these ELUCs are
14 going to be applied. And those are listed in (a)(1)
15 and (2).

16 1010(b)(3), again it's a clarification rather
17 than actually attaching a copy of an ELUC to the no
18 further remediation determination after it's already
19 been recorded. The NFR determination document can just
20 reference that ELUC without having to record it once
21 again.

22 1010(c)(2) talks about the ELUC process, what
23 can be done to modify the ELUC and what can be done to
24 release it from being on the chain of title. And the

L.A. REPORTING
(312) 419-9292

22

1 process is described there in (c)(2).

2 On the next page, 1010(d)(4), just a fairly
3 simple change there. Just a point of clarification.
4 Same is true of (d)(5) and (d)(7) and (d)(8).

5 Those are all really the result of the
6 meeting that we had with the Site Remediation Advisory
7 Committee and them giving us some input as to where
8 they thought additional clarification would make sense.
9 And I don't have anything else on the ELUC stuff at

10 this point.

11 MS. GEVING: Did you want, for purposes of
12 procedure, for the court reporter to mark that as an
13 exhibit?

14 THE HEARING OFFICER: The errata sheet? Why don't
15 we wait and do that at the end of the Agency's entire
16 testimony. We'll take it all at the same time.

17 MS. GEVING: Okay.

18 THE HEARING OFFICER: At this time before we move
19 on to testimony from Mr. Zolyak, we will take any
20 questions that the Board or members of the public here
21 might have for Mr. King regarding the testimony he has
22 just given regarding the ELUC portion of the Board's
23 Subdocket A. Why don't we take the Board questions
24 first.

L.A. REPORTING
(312) 419-9292

23

1 MS. KEZELIS: Mr. King, can you, for the record,
2 take a hypothetical example and walk us through the
3 ELUC process as it's contemplated by the rule.

4 MR. KING: Let me try anyways. We'll see if I
5 can.

6 To give you an example, this is a situation
7 where we had some problems. We have sites doing
8 cleanups under our RCRA program, our RCRA Hazardous
9 Waste Subtitle C Program.

10 Under that program they don't issue no

11 further remediation letters. They issue either a
12 permit or a closure certification.

13 So in that kind of setting what they would do
14 is they would follow the RCRA program procedures,
15 develop remediation objectives, a proposal for
16 remediation objectives, submit it to the agency, and
17 that would be included as part of their proof or their
18 proposal as to what kind of cleanup activities should
19 occur.

20 If they're proposing something, a type of
21 remediation which necessitates the use of an
22 institutional control, for instance, if they were
23 proposing a institutional -- excuse me, an industrial
24 or commercial use, that would be a situation where a

L.A. REPORTING
(312) 419-9292

24

1 land use control would need to be in place to have
2 cleanup objectives above the residential use.

3 So as part of that proposal they would also
4 develop the ELUC document. And what that would say, at
5 some point then when the approval -- when the cleanup
6 is approved and had been completed, then that ELUC
7 document would be filed on a chain of title.

8 And then once proof of that's been filed,
9 then the Agency would issue the RCRA permit or the RCRA
10 closure document referencing that ELUC, the recording

11 of that ELUC as being the institutional control in
12 place.

13 MS. KEZELIS: Thank you.

14 MS. LIU: Good morning, Mr. King. I do have a
15 question.

16 Under 762.1010(d)(8)(B) and (D), from the
17 errata sheet you removed the descriptions of the
18 vertical extent of contamination as well as the nature
19 of the contaminants of concern from the elements that
20 should be required under an ELUC.

21 Without these two elements in your ELUC,
22 there seems to be no indication of what contaminant
23 there is or how pervasive it is. Isn't this important
24 information to include in your ELUC recording process,

L.A. REPORTING
(312) 419-9292

25

1 or is there another place where you intend to keep this
2 information?

3 MR. KING: When the no further remediation
4 determination is issued, there will be a reference to
5 the contaminants of concern in there. That will be
6 included.

7 One of the reasons why we didn't want to have
8 the nature, location, direction, and movement, that
9 part is already covered. It's already covered in the
10 record that we have.

11 And to try to include all that information in

12 one document would be like repeating the entire file
13 because the contaminants there and what's in the
14 direction of movement, all of that is contained in the
15 records in the documents that are submitted to us as
16 part of the proposal for remediation.

17 And so including all of that in one document,
18 it just -- we just ended up concluding that would be
19 too much to put in that institutional control and then
20 to have it recorded. The idea is not to record a
21 document that is the entire compilation of the Agency's
22 work on the file.

23 MS. LIU: Thank you.

24 MS. GEVING: May I ask a follow-up question to

L.A. REPORTING
(312) 419-9292

26

1 help clarify?

2 MS. LIU: Sure.

3 MS. GEVING: As an example, for instance, in the
4 leaking underground storage tank program, what type of
5 plan or report would you anticipate would cover that
6 type of information? Would it be the corrective action
7 plan?

8 MR. KING: Right, there's a corrective action plan
9 submitted with a leaking underground storage site, and
10 that would provide information on the nature, location
11 of source, direction and movement of the contaminants

12 of concern. So that would all be in our record.

13 That's all available to the public.

14 In fact, as I recall, we have a reference
15 statement -- if you look at 1010(d)(9), the ELUC has to
16 state that the information from the Agency file
17 relative to that site can be obtained under the Freedom
18 of Information Act.

19 So anybody who wants more detailed
20 information, that file is there. It's kind of standard
21 practice as part of looking at a phase -- it would be
22 standard practice in looking at a Phase 1 relative to
23 one of these sites to this information.

24 MS. McFAWN: You mentioned that it would be

L.A. REPORTING
(312) 419-9292

27

1 lengthy and that's one of the reasons you deleted these
2 two elements. Would it be so lengthy to include the
3 contaminant of concern and so repetitive? I mean,
4 wouldn't that be well-advised to be in the recorded
5 document?

6 MR. KING: I don't see a direct reference to it in
7 the rest of 1010(d). I mean, that's been -- there's
8 not a direct reference, but if you look at (d)(4), it
9 requires a statement of the reason for the land use
10 limitation. That would be referencing the
11 contamination there anyways.

12 We were concerned about -- under (8) it's

13 really a reference to scaled maps there. And so we
14 thought that the scaled maps should be something more
15 simple looking at the physical features where the ELUC
16 applies, the defined horizontal extent of the
17 contamination, and then the legal boundaries of the
18 ELUC.

19 MS. McFAWN: So that's why you eliminated, in the
20 errata sheet, Subparagraph D?

21 MR. KING: Right.

22 MS. McFAWN: I looked at (d)(4) as well. I
23 thought, well, maybe that's where it's supposed to go.
24 But then there is the errata sheet that says, i.e., to

L.A. REPORTING
(312) 419-9292

28

1 protect soil or groundwater contamination or both. And
2 that kind of throws you a curve.

3 Could we have them under (4) list the
4 contaminant of concern so it's very pointedly there so
5 that anyone reviewing the recorded document would,
6 absent or without a Freedom of Information Act request,
7 be able to get an idea of the problem they're dealing
8 with or might be dealing with?

9 MR. KING: I don't have in front of me right here
10 the 740 and the 732 rules. We tried to model it -- we
11 tried to model the contents of the ELUC provision
12 relative to that. But that's something we can go back

13 and take a look at and see if -- what you're suggesting
14 is that there should be a direct reference to the
15 contaminants of concern in the ELUC.

16 MS. McFAWN: It seems like a basic point of
17 information that should be included.

18 MR. KING: That certainly makes sense.

19 MS. McFAWN: Thank you.

20 THE HEARING OFFICER: Any other questions from the
21 Board?

22 Any members of the public?

23 Yes, sir.

24 MR. RIESER: David Rieser from the law firm of

L.A. REPORTING
(312) 419-9292

29

1 Ross & Hardies. I'm here representing the Illinois
2 Corps Group, and I'm also a member of the Site
3 Remediation Advisory Committee or SRAC. Just ask a
4 couple of questions.

5 The idea of the Environmental Land Use
6 Control is to replace all of the common-law deed
7 restriction-type things that are listed in 1010; is
8 that correct?

9 MR. KING: That's correct.

10 MR. RIESER: And so they are no longer available
11 for use in any context under the program?

12 MR. KING: That's correct.

13 MR. RIESER: The idea of the ELUC is to be used

14 for those situations where no further remediation
15 letter is either not issued by the Agency or not
16 recorded with it with respect to an individual piece of
17 property, correct?

18 MR. KING: That's correct.

19 MR. RIESER: So would an ELUC apply to situations
20 where there had been a release of contaminants in the
21 Agency's overseeing the remediation of that release to
22 its, for example, Office of Chemical Safety?

23 MS. GEVING: Can you rephrase your question. I
24 don't know that we understand.

L.A. REPORTING
(312) 419-9292

30

1 MR. RIESER: And if you want to come back -- this
2 is something we haven't talked about before. If you
3 want to come back on that.

4 But basically would an ELUC be available in
5 those situations where a person was remediating a
6 release that was not registered in a site remediation
7 program but was simply being overseen by the Agency's
8 Office of Chemical Safety whether it's just been
9 release of contaminants, people are immediately taking
10 immediate response actions and addressing the immediate
11 problem but not taking the site through the Site
12 Remediation Program? And obviously it doesn't
13 otherwise apply as a RCRA site or a storage site.

14 MR. CLAY: The answer to your question is yes.

15 MR. RIESER: Thank you very much.

16 THE HEARING OFFICER: Thank you, Mr. Rieser.

17 Any other questions from the public?

18 At this point then, since we're still
19 discussing Subdocket A, the first notice, why don't we
20 move on to testimony from Gary Zolyak.

21 MR. ZOLYAK: Thank you and good morning, Madam
22 Hearing Officer. Maybe for ease of my testimony, I do
23 have a copy of my prefiled testimony which I'd like to
24 provide to the court reporter. I'll be talking a lot

L.A. REPORTING
(312) 419-9292

31

1 from the exhibit.

2 THE HEARING OFFICER: Actually we would be
3 admitting that into the record as if read in its
4 entirety, so I'll ask the court reporter to please mark
5 that as an exhibit.

6 (Whereupon, DoD Exhibit
7 No. 1 was marked for
8 identification.)

9 MR. ZOLYAK: Madam Hearing Officer, My name is
10 Gary Zolyak. I currently serve as Regional Counsel for
11 the U.S. Army Environmental Center's Northern,
12 Southern, and Central Regional Offices. Seated
13 immediately to my left is Georgia Vlahos, counsel with
14 the Naval Training Center just north of Chicago.

15 She and I and a number of other federal
16 agencies have worked very, very hard and together to
17 try to put together some hopefully valuable comments
18 and testimony.

19 In any event, my areas of responsibility
20 include all of USEPA Region 5 and within that the State
21 of Illinois. My comments today were developed in
22 consultation with other potentially-affected federal
23 agencies, including the Navy, the Air Force, and the
24 General Services Administration.

L.A. REPORTING
(312) 419-9292

32

1 On behalf of the Army and these other
2 agencies, I wish to thank you for the opportunity to
3 present testimony today on the proposed revisions to
4 the Agency's Part 742 TACO regs.

5 Before turning to the substantive portion of
6 my testimony, I want to commend the Agency for its
7 cooperation and invaluable assistance to us in the
8 federal community.

9 In particular, I wish to express my
10 appreciation to Bureau of Land officials, including
11 Ms. Geving who is here today, to have met with DoD
12 representatives to discuss several alternatives for
13 making Environmental Land Use Controls, or ELUCs,
14 workable on federal installations.

15 Bureau personnel have agreed to continue this
16 dialogue and meet with DoD and GSA representatives next
17 week in Springfield to further discuss ELUC
18 implementation under Parts 732 and 740. We also
19 appreciate the Board's willingness to listen to our
20 concerns with regard to the proposed amendments to
21 Part 742.

22 Because we are asking this Board today to
23 exempt federal facilities from those specific
24 deed-recording recommendations contained in the

L.A. REPORTING
(312) 419-9292

33

1 proposed TACO regs, we understand that we need to
2 testify to you why we believe this should be done.

3 This justification lies simply in the fact
4 that federal facilities cannot and do not operate like
5 private facilities. They have unique legal restraints
6 and obligations on their operations and facility
7 management activities, one of the most important being
8 that they cannot deed record land use restrictions on
9 nonexcess, and that's important to us, nonexcess
10 federal property, that is on property which is not
11 being transferred out of the federal government into
12 private hands.

13 This particular legal limitation stems from
14 the reality that the ultimate authority to manage all
15 federal lands rests solely with Congress pursuant to

16 the Property Clause of the U.S. Constitution. And
17 Congress has simply not chosen to broadly grant
18 ownership of, and associated property interested
19 divestiture authority over, federal lands to those
20 executive agencies like the DoD, which happen to occupy
21 the land in furtherance of mission-related
22 requirements.

23 We strongly believe that because of this
24 reality, at a minimum, the proposed Part 742 revisions

L.A. REPORTING
(312) 419-9292

34

1 should be amended to create a specific exemption for
2 federal facilities from ELUC recordation requirements
3 while the property remains in federal hands.

4 In lieu of deed-recording ELUCs in connection
5 with cleanups at our RCRA Corrective Action, LUST, and
6 CERCLA sites, we have proposed to the Agency and USEPA
7 Region 5 execution of a tri-party ELUC Memorandum of
8 Agreement, MOA, which we have used in other USEPA
9 regions.

10 Under such facility-specific MOAs, DoD
11 facilities within the state would commit to, among
12 other things, certain periodic site inspection and
13 reporting requirements so as to ensure that our
14 facility personnel adequately maintain those site
15 remedy-based ELUCs necessary for long-term protection

16 of human health and the environment. And this is why
17 we're meeting next week, in part why we're meeting next
18 week in Springfield.

19 We therefore propose today that the pending
20 amendments to the TACO regs be revised to exempt
21 federal facilities from the aforementioned
22 deed-recording requirements subject to a given
23 facility's execution of, and subsequent compliance
24 with, such a tri-party ELUC MOA.

L.A. REPORTING
(312) 419-9292

35

1 I now would like to comment to you on the
2 specific Part 742 concerns. And this is on Page 6 of
3 my testimony.

4 Section 742.1010(b)(1) provides recording
5 requirements associated with the use of ELUCs. This
6 proposed section would require that an ELUC approved by
7 the Agency must be, quote, recorded in the Office of
8 the Recorder or Registrar of Titles for the county in
9 which the property that is the subject of the ELUC is
10 located. A copy of the ELUC demonstrating that it has
11 been recorded must be submitted to the Agency before
12 the Agency will issue a no further remediation
13 determination.

14 As I indicated earlier in my testimony, DoD
15 facilities do not have the authority under current
16 federal law to deed record land use restrictions on

17 active base properties. Hence this provision is very
18 problematic for us, and we feel we should be exempted
19 from it.

20 No. 2 is Section 742.1010(b)(2) provides that
21 an ELUC approved under this section will not become
22 effective until officially recorded in the chain of
23 title for the property that is the subject of the ELUC
24 in accordance with Subsection (b)(1) of this section.

L.A. REPORTING
(312) 419-9292

36

1 Again, since these DoD facilities lack the
2 authority to comply with this requirement, we will be
3 effectively precluded from using ELUCs at any of our
4 LUST or RCRA remediation sites. We would ask to be
5 exempted from this subparagraph as well.

6 No. 3, Section 742.1010(b)(3), this section
7 provides that a copy of the ELUC as recorded must be,
8 quote, attached to the instrument memorializing the
9 Agency's no further remediation determination.
10 Recording of the no further remediation determination
11 and confirmation of recording must be in accordance
12 with the requirements of the program under which the
13 determination was issued.

14 This section is likewise problematic for us
15 simply because the recording of any NFR letter from the
16 Agency delineating the imposition of land use

17 restrictions would be tantamount to the recording by
18 deed of such restrictions which DoD facilities do not
19 have the authority to do even if no deed per se were
20 prepared. We would ask to be exempted from this
21 requirement as well.

22 No. 4, Section 742.1010(d)(2), that section
23 provides that any ELUC must contain an identification
24 of the property to which the ELUC applies by the common

L.A. REPORTING
(312) 419-9292

37

1 address and, quote, legal description and real estate
2 tax index/parcel index number.

3 This provision is problematic in part because
4 DoD facilities do not usually have real estate tax or
5 parcel index numbers. Moreover, for properties
6 remaining in federal hands, we do not believe it should
7 be necessary for us to actually incur the costs to
8 legally survey our remediation sites when their
9 boundaries can be made readily identifiable by other
10 means.

11 Most certainly, our facility personnel would
12 not look to such a recorded legal nicety to ensure
13 future ELUC maintenance. Instead, they would rely on
14 more readily identifiable site location and boundary
15 information placed into the facility's master plan or
16 similar facility-wide land use planning documents.

17 We believe one alternative which should be

18 allowed for both affected private and federal
19 facilities is to be able to provide GIS coordinate
20 information to the Agency in lieu of having to submit a
21 legal description based upon a related survey.

22 Such information in a suitable database would
23 clearly be more user friendly for those facility
24 personnel who would be responsible for overseeing

L.A. REPORTING
(312) 419-9292

38

1 day-to-day ELUC compliance at their facilities.

2 If a particular remediated site was to be
3 later transferred to a third party, then that database
4 information could be provided to the transferee for the
5 use as well and, if necessary, a legal site prepared
6 for the site at that time.

7 Finally our concern is Section
8 742.1010(d)(6.) That section provides that an
9 ELUC must contain a statement that, quote, the
10 limitations or requirements apply to the current owner
11 or owners, occupants, and all heirs, successors,
12 assigns, and lessees.

13 Again, this is problematic for DoD facilities
14 who have only limited authority to divest the federal
15 government of existing property rights when excess
16 property is not being transferred out of federal hands
17 pursuant to base closure law.

18 Assuming a LUST or RCRA Corrective Action
19 site with implemented ELUCs were to be disposed of
20 pursuant to base closure law, then and only then could
21 the DoD component be in charge of the transfer-imposed
22 deed restrictions on the property so that they ran with
23 the land and bound the transferee and subsequent owners
24 and operators.

L.A. REPORTING
(312) 419-9292

39

1 In summary, the unique nature of those real
2 estate management and disposal authorities possessed by
3 the DoD effectively preclude us from complying with the
4 deed-recording requirements contemplated in the
5 proposed TACO regs.

6 This, in turn, appears to prevent DoD
7 facilities from obtaining Agency buy-in for our use of
8 risk-based cleanup approaches at our active Illinois
9 installations.

10 To remedy this situation we, therefore, ask
11 that the Board exempt federal facilities from those
12 requirements conditioned upon us entering into the
13 aforementioned ELUC MOA with the Agency and the USEPA
14 for the establishment of procedures to ensure the
15 future maintenance of all necessary ELUCs on our
16 facilities.

17 Thank you very much for your time and
18 consideration of the matters which I have addressed in

19 my testimony this morning. I would be happy to answer
20 any questions you may have. Thank you.

21 THE HEARING OFFICER: Thank you. We'll start with
22 questions from the Board and the Board's technical
23 unit.

24 MS. KEZELIS: I have a question of clarification.

L.A. REPORTING
(312) 419-9292

40

1 Could you for the record explain what GIS is.

2 MR. ZOLYAK: Boy, probably the easiest way to
3 explain it would be the use of satellites do really
4 come up with a very exact, very exact location.

5 MS. KEZELIS: Designation.

6 MR. ZOLYAK: Yes.

7 Am I correct in that, Georgia?

8 MS. VLAHOS: Yes.

9 MS. KEZELIS: Is it something akin to Global
10 Positioning Satellite systems?

11 MR. ZOLYAK: Yes.

12 MS. KEZELIS: It's not something that we on the
13 state level typically deal with. I wanted to make sure
14 that the record clarified what a GIS designation
15 contemplated.

16 MR. ZOLYAK: Thank you.

17 MS. KEZELIS: Can you also describe for the
18 record, please, the process by which property of the

19 United States converts from nonexcess to excess.

20 MR. ZOLYAK: As I think you're very much aware,
21 Congress decides, for federal installations, what to
22 keep active and what not to. And every three years,
23 four years there has been a process called BRAC, base
24 relocation and closure. So it's really Congress that

L.A. REPORTING
(312) 419-9292

41

1 tells us what to keep active and what not.

2 MS. VLAHOS: Gary, if I might add.

3 MR. ZOLYAK: Sure.

4 MS. VLAHOS: In addition to the BRAC process, it's
5 up to really the installation to determine what
6 facility has access to its deed and what does not.

7 And GSA is the agent then disposing of any
8 properties, the General Services Administration, for
9 any property that's deemed to be excess to a specific
10 provision.

11 Now, the property has to be shopped first
12 through the federal community to see if there's any
13 other federal use and, if not, through GSA procedures
14 is converted I believe through an auction or bid
15 process to the public and becomes private property.

16 But we can't do that. Only the General
17 Services Administration, which acts through the
18 authority of Congress as the real estate agent of the
19 federal government, can do that. And only under

20 specific circumstances.

21 Therefore, for any operating federal agency,
22 it has no ability to access its property directly
23 except through the direct authority given by the
24 Department of Defense through the BRAC Legislation that

L.A. REPORTING
(312) 419-9292

42

1 Mr. Zolyak has mentioned. That's all that I would add.

2 MS. KEZELIS: That was helpful. Thank you.

3 MR. MELAS: Is that the sole exception, just under
4 BRAC?

5 MS. VLAHOS: Mr. Melas, yes. For the Department
6 of Defense, the sole exception for taking our property
7 beyond some very minor leasing authority, giving it
8 over to the private sector in fee is through the BRAC
9 process. And as you know, we have not been authorized
10 to go through any additional BRAC dispositions or
11 realignments.

12 MR. MELAS: It might be helpful to me if you went
13 through a little bit of a situation that we're all
14 familiar with here in Illinois where they closed the
15 Joliet facility. Now, that was a Department of Defense
16 facility, was it not?

17 MS. VLAHOS: Yes, it was.

18 MR. MELAS: And then pieces of it were retained in
19 the federal, pieces of it went to the Veterans

20 Administration, and then other parts of it are going
21 into the private sector. Now, how did that happen?

22 Those pieces that went to the private sector,
23 for example, the landfill that the county has down
24 there, did that have to be transferred from DoD to GSA

L.A. REPORTING
(312) 419-9292

43

1 who shopped it around and then it finally became
2 available to the public, or was that under some special
3 legislation?

4 MS. VLAHOS: No, that was under special
5 legislation, namely BRAC.

6 MR. MELAS: Oh, it was under BRAC.

7 MS. VLAHOS: It was under BRAC. Being a military
8 institution, that was deemed to be excess by Congress,
9 and authority was given directly to I believe it was an
10 Army facility, correct, Gary?

11 MR. ZOLYAK: That is correct.

12 MS. VLAHOS: To do the disposal. I don't know if
13 this is necessary to your understanding, Mr. Melas, but
14 under BRAC too there is an initial shopping through
15 federal agencies and also the homeless.

16 MR. MELAS: Yes, I'm familiar.

17 MS. VLAHOS: So there is the same sort of concept.
18 But unlike any non-BRAC properties, the Department of
19 Defense directly administers that process.

20 MS. KEZELIS: Let me follow up some more with

21 that. Once the property has been shopped through
22 fellow federal agencies and is determined that there
23 are no other federal agencies interested in the
24 property, then what is the nature of the legal

L.A. REPORTING
(312) 419-9292

44

1 arrangement with respect to GSA acting as real estate
2 agent? Is this pursuant to preexisting law, or is it
3 an understanding of an inter-Agency agreement entered
4 into between DoD?

5 MR. ZOLYAK: As far as I'm aware, preexisting law.

6 MS. KEZELIS: GSA automatically has that --

7 MS. VLAHOS: The Federal Property Management Act
8 or something along those lines. We refer to it in
9 Mr. Zolyak's testimony.

10 MR. ZOLYAK: Somebody who maybe hasn't been
11 involved in the federal system, you know, you may look
12 at a building -- for example, I walked past the Social
13 Security Office today coming to this building. I think
14 many people, laymen if you will, will look at that
15 building and say, oh, Social Security owns that
16 building.

17 Truth is they don't, it's GSA who really owns
18 that property. And they ultimately make that disposal
19 decision. They have that authority.

20 MS. McFAWN: Is the ownership of that by GSA, that

21 building, for example, is that recorded?

22 MR. ZOLYAK: Yes, it is.

23 MS. McFAWN: And Defense properties, are those on
24 record?

L.A. REPORTING
(312) 419-9292

45

1 MR. ZOLYAK: As far as I'm aware, yes.

2 MS. VLAHOS: For example, Great Lakes became about
3 because the Commercial Club of Chicago purchased a
4 property and then donated it as a gift to the
5 U.S. Navy, to the government. So there would be a
6 record of that.

7 In addition, we grew through condemnation
8 during World War II, and of course those deeds would be
9 recorded in the Lake County Recorder's Office.

10 So the initial transaction certainly, but all
11 of any variety of transactions that might otherwise be
12 recordable in the civilian world so to speak after
13 acquisition would not be short of disposition of a
14 property through BRAC or the GSA process.

15 MS. McFAWN: Could the GSA record such a
16 limitation on the property?

17 MS. VLAHOS: The General Services Administration?

18 MS. McFAWN: Since they're the owner.

19 MS. VLAHOS: Gary, do you want to take that?

20 MR. ZOLYAK: I think they would -- as far as I'm
21 aware, they are the only outfit that could.

22 MS. McFAWN: Okay.

23 MS. VLAHOS: Their policy, however, is that they
24 would take over at the point of excessing. So even

L.A. REPORTING
(312) 419-9292

46

1 though they have the authority, they do so only in the
2 excess process as far as our property is concerned.

3 MS. McFAWN: Why is that?

4 MS. VLAHOS: Because their public policy is to
5 retain -- they interpret their authority as giving them
6 very little flexibility of disposition of real estate
7 property rights and that bundle of rights that comes
8 with owning something fee simple on behalf of the
9 U.S. Government.

10 MS. McFAWN: But they would have no objection to,
11 for instance, DoD entering into remediation?

12 MS. VLAHOS: Yes, they do. You mean for recording
13 of --

14 MS. McFAWN: No, I just meant the very act of the
15 remediation.

16 MS. VLAHOS: That's right. In fact we are
17 responsible for conducting remediations. And our
18 interactions, as all the regulators know, are directly
19 between the tenant DoD agencies and other federal
20 agencies for that matter with USEPA Region 5, then with
21 IEPA. There is a direct interface internally.

22 MS. McFAWN: So as tenants you have the property
23 rights to go ahead and execute the remediation, but you
24 do not have the right to impact the deed?

L.A. REPORTING
(312) 419-9292

47

1 MS. VLAHOS: That's right. Title matters outside
2 of BRAC are solely within the authority of the General
3 Services Administration to the extent they can be
4 granted permission to dispose of rights by the
5 U.S. Congress.

6 MS. KEZELIS: Under any circumstances, once the
7 property has been declared as assessed and GSA is
8 supposed to convey it into private hands, then the
9 position of the United States and all its agencies is
10 that an ELUC would be recorded by GSA.

11 MR. ZOLYAK: Correct.

12 MS. KEZELIS: After the transfer?

13 MR. ZOLYAK: Correct.

14 MS. KEZELIS: Or immediately prior to transfer?
15 Where in the process would GSA step in and say now we
16 can record it?

17 MR. ZOLYAK: I would believe it would be at the
18 point of transfer.

19 MS. KEZELIS: After transfer.

20 MR. ZOLYAK: Right.

21 MS. KEZELIS: And do you anticipate having further
22 discussions with the IEPA next week?

23 MR. ZOLYAK: That's correct.

24 MS. KEZELIS: Thank you.

L.A. REPORTING
(312) 419-9292

48

1 MS. McFAWN: I had some questions about the GIS
2 master plan. You have to forgive me, I'm not that
3 familiar with it, and I don't know how it compares to a
4 survey. Could you explain why you prefer that over a
5 survey. I'm more used to using the surveys to make
6 sure that the boundaries of the site are maintained.

7 MR. MELAS: In my experience it's in your Cadillac
8 when you push the on-site button.

9 MS. McFAWN: That's fine, but I don't have that
10 Cadillac, I have a Ford.

11 MR. ZOLYAK: I can't say that I'm an expert with
12 GIS, but my experience with it, it's a far more precise
13 type of a measure in a nutshell.

14 MS. VLAHOS: I don't know that we spoke correctly
15 earlier in terms of its being. But my understanding is
16 it's information that will enable you to locate the
17 site in a much more recognizable form in the typical
18 metes and bounds description.

19 And our goal here is that someone is supposed
20 to maintain some sort of institutional control on a
21 rather tiny piece of ground, that we want to give our
22 base folk the best possible means of identifying that.

23 And a legal typical survey that we're all accustomed to
24 does not accomplish that specific process as well as,

L.A. REPORTING
(312) 419-9292

49

1 in my understanding, the GIS would.

2 MS. KEZELIS: But it's the only federal government
3 that uses the GIS?

4 MR. ZOLYAK: As far as I'm aware.

5 MS. McFAWN: Could the Agency address this?

6 MR. KING: GIS is part of our
7 information-gathering processes in a lot of areas.

8 MS. LIU: I think it's important to make a
9 differentiation. There's a GPS, which is a Global
10 Positioning Satellite. Those are the satellites that
11 are in outer space that send signals to the earth so
12 you can pinpoint something very accurately.

13 Then there is GIS, which is the Geographical
14 Information System. That actually uses information
15 from those GPS satellites plus the coordinates into the
16 database.

17 And you can bring up a map say of Illinois,
18 be able to click on a city, and the database would pop
19 up on any variety of information, whether it's
20 contamination that was found at a site in one point in
21 time or the distance to the nearest McDonald's.

22 So there is actually two different components
23 to that, and I think it's important to remember.

24 MR. EASTEP: Can I just add something to that too.

L.A. REPORTING
(312) 419-9292

50

1 The information you obtained from a legal survey could
2 be input into a GIS system and help define it, correct,
3 so they're not mutually exclusive?

4 MS. VLAHOS: But it's not necessary, however, that
5 that survey information be done since it can be
6 accomplished currently without that. But it's not
7 currently.

8 MS. LIU: May I ask who gathers coordinate
9 information for those?

10 MR. ZOLYAK: Army Corps of Engineers.

11 MS. LIU: Are they state-licensed planned surveys?

12 MR. ZOLYAK: Ma'am, that I don't know.

13 MS. VLAHOS: I don't know that state licensure
14 would be required. There's a supremacy clause issue
15 here. The state fortunately or unfortunately cannot
16 require particular licensing for federal employment,
17 therefore I don't think that it would be necessary for
18 them to be registered under the State of Illinois.
19 However, we of course have federal standards.

20 MS. LIU: How does DoD ensure the quality of the
21 information that gets placed into this database?

22 MS. VLAHOS: Well, I think GPS speaks for itself.
23 It's currently being used in everything and anything.

24 Therefore if we're off, the entire world is about to

L.A. REPORTING
(312) 419-9292

51

1 collapse I suppose on a certain level.

2 MR. ZOLYAK: Should the Board like additional
3 information, we could at a future meeting have somebody
4 from the Corps here to give you a better understanding
5 perhaps of the concept of it. We'd be happy to do
6 that.

7 THE HEARING OFFICER: That would be nice. I can
8 coordinate that with you.

9 MR. ZOLYAK: Sure.

10 MS. LIU: I guess what I was concerned about was
11 that databases are subject to corruption, data loss,
12 failure of the person who inputs the data to do it
13 correctly. It's not something that's necessarily a
14 legal record like our deeds would be.

15 And I was just wondering what assurances does
16 DoD have in place that will prevent data corruption or
17 loss of data if the system is upgraded, that that
18 information will stay in a permanent record?

19 MR. ZOLYAK: To be frank with you, I don't know
20 that I could honestly answer that question with enough
21 detail for you. As I said, perhaps the best course of
22 action would be to have someone from the Corps here who
23 could go into that sort of nitty-gritty detail for you.
24 And I'd be happy to arrange for that.

1 THE HEARING OFFICER: Thank you.

2 MS. McFAWN: Can I just ask the Agency some
3 questions about this. And these might come up during
4 your meeting next week with DoD.

5 Have you ever used this type of reference
6 versus a survey when you are trying to work with your
7 remediator?

8 MR. KING: No, we haven't. One of the things that
9 really I think is a real struggle for us on this is
10 we're used to looking at the standard system of
11 recording things. You put it on a deed, now it's there
12 long-term. Any future property user is on notice that
13 he's going to need to go to that county office, find
14 out what's on the chain and title relative to that.

15 MS. McFAWN: Or even to talk to the property owner
16 about where the property lines are and where --

17 MR. KING: Yeah. That's just part of every state
18 system of making sure that there is a proper notice in
19 the future as to conditions at a site.

20 What we're struggling with with the DoD
21 facilities is, okay, we reach some agreement under an
22 MOA as to what should be the restrictions of use as to
23 let's just say Savannah. Savannah has got a base
24 that's going through closure at this point.

1 Parts of it stay within DoD ownership for a
2 long period of time. 30, 40 years from now the
3 property is excessed and they go to sell it, where
4 would anybody go to find that information as far as
5 land use restrictions.

6 Do they go to the base? Is there some kind
7 of -- is DoD going to maintain a database throughout
8 the nation of all institutional controls that are in
9 place relative to the bases it maintains?

10 So I think that's kind of the question we
11 have. And I think it really relates not just to the
12 specifics of whether it's surveyed or it's GIS but
13 where is this information going to be housed in the
14 future and how is somebody going to know what this all
15 says.

16 MS. McFAWN: Can I ask you one other question.
17 Have you ever engaged in a remediation at a DoD
18 facility actively in the Agency?

19 MR. KING: We're closely involved. Part of our
20 program involves working with DoD and USEPA in
21 overseeing remediation activities at DoD-owned
22 property throughout the state.

23 MS. McFAWN: This is so that they can use TACO and
24 get a --

1 MR. KING: So they do things right. It's kind of
2 like so they can get things done.

3 MS. McFAWN: In some of our enforcement cases, we
4 have looked at remediated sites or unremediated sites,
5 and the Board has relied on surveys to know what the
6 boundaries of the area of contamination is. And I'm
7 kind of concerned that if I don't have that in the
8 future, is that something that I should be worried
9 about at a federal site or not?

10 MR. KING: I think it would be interesting to
11 see -- I would guess that the Army Corps of Engineers
12 has surveyors on staff that go out and survey things.
13 I'm sure they do.

14 Now, whether they're licensed in each state
15 they operate, I don't know that. But I'm sure there
16 are criteria in place relative to the surveyors that
17 the Corps uses as to what kind of procedures they have
18 to go through to be approved for doing that. And I
19 think that there might be a way to give some
20 recognition to that kind of system.

21 MS. McFAWN: Going back one step. Before transfer
22 of property, is there any need for the State of
23 Illinois, the Board, or the Agency to have the area
24 defined by a survey for its purposes of inspection?

1 MR. KING: Oh, absolutely, yes, yes, we will need
2 that.

3 MS. McFAWN: Because we're all talking about this
4 happening at the point of transfer. Well, what about
5 pre-transfer?

6 MR. KING: We will absolutely need to know
7 exactly -- if there's an area for which, for instance,
8 that an engineered barrier is going to be put in place,
9 we will need to know exactly where that's at.

10 MS. GEVING: May we back up just a moment.
11 Mr. King asked a very relevant question regarding the
12 entire plan of how they're going to catalog their sites
13 and the details of the site and the remediation that's
14 ongoing there, and I'd like to just sort of direct that
15 question to you because I think that if you talk a
16 little bit about the base master plan and actually the
17 ideas behind the MOA and explain that process a little
18 bit, that might answer some of the Board's questions.

19 MS. VLAHOS: Certainly.

20 The Memorandum of Agreement that is being
21 contemplated here will, first of all, provide full
22 information as to the location. It requires a notation
23 on the base master plan and the GIS coordinates. So in
24 terms of finding that out, it will be there. It will

1 also be of public record. I imagine it's FOI under the
2 same argument you all were discussing a little earlier.

3 But it sets forth very stringent criteria.
4 We will be subject to quarterly inspections to ensure
5 that those controls are indeed in place. There will
6 have to be certifications by the base commander, who's
7 career can be affected if the certification is not
8 true.

9 So we are doing more than the private sector.
10 We're offering, through this Memorandum of Agreement,
11 to ensure that there's full compliance, that the
12 regulators know specifically where all this is and that
13 we do so utilizing a means that makes sense under the
14 circumstances.

15 Understand, for example, that Great Lakes is
16 comprised of 1600 acres. If you're asking us to survey
17 every remediation spot and to use tax payer funds, we
18 are after all a public agency for that purpose, I think
19 it's placing an undue burden on us when we have all
20 these very clear guidelines and directives within the
21 Memorandum of Agreement that accomplishes the same
22 thing. And I think it imposes a workable solution on
23 the problem of our inability to record.

24 MS. GEVING: At the time when the property may

1 transfer, becomes an excess property and it transfers
2 to a private individual, there will then be created a
3 deed that will be recorded in the chain of title,
4 correct?

5 MS. VLAHOS: That's correct. And in addition
6 we're obligated to tell the property owner, under the
7 terms of the proposed MOA, specifically about the site.

8 MS. GEVING: And with that you mean that all the
9 provisions that currently are in the ELUC, including
10 Errata Sheet No. 1 with regard to, for instance, all
11 heirs, successors, assigns pertaining to them, that
12 would then come back into play even though when it was
13 under your jurisdiction you couldn't meet certain
14 requirements, but it will pass on to the new property
15 owner with the requirements of any other individual
16 property owner, correct?

17 MR. ZOLYAK: That's correct.

18 MS. GEVING: And how are you going to ensure, when
19 you transfer that piece of property to a private
20 individual, that all the requirements in our
21 regulations will be complied with?

22 MS. VLAHOS: There's a notice provision in the
23 proposed MOA that we're supposed to give you notice
24 that that is happening, and we're also obligated under

1 the proposed MOA to do precisely what you're saying.

2 MR. ZOLYAK: And this MOA concept, this is not the
3 first time we've used it. We've done it down south.
4 Seems to have worked well. I hope it will work just as
5 well in Illinois.

6 MS. GEVING: I'm trying to clarify for the Board
7 that there are issues that you are asking that we are
8 trying to address. We are still currently under
9 negotiations. It's by no means a final agreement at
10 this point. We have ongoing discussions. I can
11 anticipate that this is also going to be an issue in
12 the 732 and 740 regulations.

13 MR. ZOLYAK: That's correct.

14 MS. GEVING: Which I believe you'll be testifying
15 at some point in time in the future on those as well.

16 MR. ZOLYAK: That's correct.

17 MS. GEVING: But these are all issues that we're
18 looking at in the process of our negotiations.

19 MS. KEZELIS: Under the question of clarification,
20 in addition to not being able to record the ELUC for
21 the reasons you've already testified to, you also have
22 the same predicament with respect to the memorandum of
23 understanding.

24 MR. ZOLYAK: Correct.

1 MR. KING: I was curious, you were suggesting that
2 the Board rule exempt all federal facilities, but DoD
3 would only have authority to negotiate an MOA on behalf
4 of DoD, correct?

5 MR. ZOLYAK: Correct.

6 MR. KING: So wouldn't it be more appropriate to
7 have the exemption just to go to DoD facilities?

8 MR. ZOLYAK: I think we have been thinking more
9 broadly than that in our negotiations. And it just
10 seems to us more prudent that GSA is really the Agency
11 that has the responsibility or ability to transfer we
12 think more largely than just DoD.

13 MR. KING: But then shouldn't GSA be part of any
14 MOA then?

15 MR. ZOLYAK: They can be, they can be. And they
16 will be part of the negotiations next week.

17 MS. GEVING: Does DoD anticipate, either sometime
18 during the hearing process either today or the next set
19 of hearings or during the public comment period,
20 proposing some language to exempt yourself from the
21 provisions that you cited in your testimony?

22 MR. ZOLYAK: Yes, we will be doing that. And that
23 is some of the issues we'd like to work with you and
24 your agency on next week. But that is our plan, yeah.

1 MS. GEVING: Thank you.

2 THE HEARING OFFICER: Any other questions from the
3 Board?

4 Mr. Rieser.

5 MR. RIESER: Just real quickly, why does the
6 department have a problem with the ELUC that hasn't at
7 least in the public forum like this recorded a problem
8 with the no further remediation letter which of course
9 has many of the same requirements?

10 MS. VLAHOS: So your question is why do we have a
11 problem recording the NFR also?

12 MR. RIESER: In the prior process it hasn't come
13 up with respect to the prior NFR.

14 MS. VLAHOS: It has come up. We've basically been
15 not able to close out our remediation process. This
16 memo process gives us an opportunity to address this,
17 which is why you're seeing us today.

18 MR. RIESER: Thank you.

19 MS. McFAWN: When you conclude these discussions
20 about an MOA, I assume we'd see the MOA, is that
21 correct, the Board, before? Would this happen before
22 we adopt these amendments?

23 MS. GEVING: I'm hoping we have something final
24 soon. We are really at the beginning of the

1 negotiation process. We went back and forth on a few
2 drafts that sort of went by the wayside for a period of
3 over a year, and nothing really happened. And then
4 recently the negotiations started again, and we have
5 some comments back.

6 This is our first substantive meeting I guess
7 you could say next week. So I'm hoping that we can
8 come up with something final then. But I don't know
9 the exact time frame. I'd hate to promise something
10 and break my promises.

11 MR. ZOLYAK: I do want to mention how appreciative
12 we are of the Bureau of Lands. They have been very
13 helpful in negotiating this MOA.

14 MS. McFAWN: You had mentioned that you could have
15 somebody from the Corps eventually here to discuss the
16 survey issue. I wonder if also we could have someone
17 from GSA to discuss their problem with recording this
18 on DoD's behalf?

19 MR. ZOLYAK: Sure. That I could do.

20 MS. McFAWN: We wish you luck and hope that you
21 can at least give us a draft MOA so we know what you're
22 talking about.

23 THE HEARING OFFICER: Anything else?

24 At this point does anyone else wish to offer

L.A. REPORTING
(312) 419-9292

62

1 testimony for the Board regarding the Subdocket A ELUCs

2 we'll get started with the next one.

3 MS. GEVING: The order that I anticipated goes in
4 order from front to back of the rulemaking for purposes
5 of trying to organize a little bit. So the first
6 person who will testify will be John Sherrill, followed
7 by Jim O'Brien, Larry Eastep, Chris Nickell, Connie
8 Sullinger, Doug Clay, Tracey Virgin Hurley, Gary King,
9 Tom Hornshaw. And Rick Cobb is on our panel in case
10 he's needed.

11 So with that I'll turn it over to John to do
12 a summary.

13 MR. SHERRILL: My name is John Sherrill, and I've
14 worked for the Illinois Environmental Protection Agency
15 in the Remedial Project Management Section since May of
16 1992. I previously testified before the Board in the
17 Tiered Approach To Corrective Action Objectives and
18 more recently in the proportionate share rulemaking.

19 Before I get started, I too would like to
20 applaud the Board and the Regulated Communities Review
21 Group for their careful attention during the many hours
22 of testimony during the TACO hearings in 1996 and 1997.
23 And I wish to commend the Board for its deliberations
24 and thoroughness in the TACO Rulemaking.

L.A. REPORTING
(312) 419-9292

64

1 Your efforts have produced a quality approach
2 to establish corrective action objectives at

3 remediation sites, and I can testify to discussions
4 with many professionals in the environmental community
5 of the workability of TACO.

6 Nothing in the proposed amendment that I will
7 discuss will affect two principal tenets of TACO, one
8 being that remediation objectives will be protective of
9 human health and the environment and, two, the land use
10 for which remedial action is undertaken will not be
11 modified without consideration of the adequacy of such
12 remedial action for the new land use.

13 Specifically what I am testifying is on
14 Sections 742.220(a) and (b) regarding the soil
15 saturation limit. 742.220(a) is a prohibition or a
16 sealing value for an inhalation objective, and
17 762.220(b) is a sealing value for a groundwater
18 objective.

19 The soil saturation values represent a
20 chemical/physical limits in soil and are not risk
21 based, but they represent the concentration at which
22 soil pore, p-o-r-e; air; or water is saturated by that
23 chemical. In other words, air or water can only hold
24 so much of a chemical. And the higher the value of

L.A. REPORTING
(312) 419-9292

65

1 solubility of a chemical, it indicates the greater
2 tendency to dissolve in water.

3 TACO has -- and I'm making just one or two
4 minor little changes here. TACO has a three-tier
5 approach for developing remediation objectives. And
6 the tiers can operate fully independent of each other.

7 The objective of a Tier 3 evaluation is to
8 allow for the development of a remediation objective
9 using alternative parameters not found in Tier 1 or
10 Tier 2. And like I said, the way the TACO rules
11 currently read, there's a prohibition on the Tier 2 and
12 Tier 3 with this soil saturation sealing value.

13 My testimony today, the soil saturation
14 limits should not be an absolute prohibition for
15 development of a Tier 3 remediation objective. And
16 this is consistent with my testimony on December 2nd,
17 1996, Pages 171 through 177 of that transcript. And I
18 believe, Kim, that they're added to my testimony today.

19 And specifically I had stated at that time
20 even if the contaminants at a site exceed their
21 respective soil saturation value, one can propose a
22 Tier 3 demonstration to show that a site does not pose
23 a risk to human health and the environment.

24 So again my change is to lift this Tier 3

L.A. REPORTING
(312) 419-9292

66

1 restriction on the 742.220(a) and (b). And the purpose
2 of this rule change will allow a person to present a
3 Tier 3 evaluation for chemicals where the soil

4 saturation limit is exceeded.

5 Specifically a person may be able to
6 demonstrate a contaminant will not pose an unacceptable
7 risk to human health even if that contaminant's soil
8 saturation limit is exceeded.

9 And that concludes my testimony.

10 MS. GEVING: Thank you, Mr. Sherrill.

11 Did you want to move on to the next summary?

12 THE HEARING OFFICER: Yes, please.

13 MS. GEVING: Mr. O'Brien.

14 MR. O'BRIEN: My name is James Patrick O'Brien.
15 I'm the manager of the Office of Chemical Safety with
16 the Illinois Environmental Protection Agency. Among
17 other qualifications, I have a bachelor of science
18 degree in chemistry. I will summarize my written
19 testimony.

20 My testimony covers a proposed new
21 Subsection (f) of Section 742.225. This section
22 generally describes the demonstration of compliance
23 with remediation objectives.

24 This new subsection will clarify the

L.A. REPORTING
(312) 419-9292

67

1 calculation and reporting of soil sample concentrations
2 which are used to compare to corrective action
3 objectives. This clarification is that analyte

4 concentrations in soil will be reported on a dry weight
5 basis.

6 The underlying problem is that soil samples
7 collected from the environment have variable moisture
8 content depending upon the climatic conditions at the
9 time of sampling. This means that repeat soil samples
10 taken on different days at the same location and
11 representing the same mass of contaminants could vary
12 in moisture.

13 Since the moisture affects the weight of the
14 sample, the calculated concentration on a weight/weight
15 basis would vary with the moisture content. It is
16 entirely possible that a given mass of contamination
17 could meet objectives if the soil is very wet and not
18 meet them if that soil were dryer.

19 The proposed rule resolves this inconsistency
20 by requiring that soil samples be reported on a dry
21 weight basis. Dry weights are easy to determine and
22 are reproducible.

23 Exceptions to this would be those results
24 reported on a weight volume basis such as the synthetic

L.A. REPORTING
(312) 419-9292

68

1 precipitation leaching procedure and the toxic
2 characteristic leaching procedure. Another exception
3 would be the property pH.

4 This situation involving wet or dry weight

5 reporting arose because the SW-846 analytical methods
6 specified in Section 742.210 were originally developed
7 by USEPA to apply to testing solid waste as well as
8 contaminants in groundwater soil and sediment.

9 The results of such test methods are used for
10 many invaried purposes of which TACO-type applications
11 are only a subset. Many SW-846 methods therefore allow
12 a reporting of results on a wet or a dry weight basis
13 depending upon the use to which the results will be
14 put.

15 In the case of this regulation, the reporting
16 of sample results on a normalized and consistent basis
17 necessitates specifying a dry weight basis for
18 weight/weight concentrations. Consequently, it is
19 entirely consistent with the SW-846 procedures for the
20 TACO rules to define circumstances for reporting
21 analytical results on a dry weight basis.

22 This approach is also consistent with certain
23 similar federal programs such as the TSCA regulation of
24 PCBs and the Super Fund Contract Laboratory Program,

L.A. REPORTING
(312) 419-9292

69

1 both of which require soil samples to be reported on a
2 dry weight basis.

3 The Illinois EPA's laboratory currently
4 reports soil concentrations on a dry weight basis and

5 specifies it for the Agency's own contract
6 laboratories.

7 My written testimony also cites several
8 widely-used analytical chemistry textbooks that make
9 similar statements about the importance of normalizing
10 data by the use of dry weight reporting results.

11 In terms of economical reasonableness, the
12 cost of determining dry weight is minimal. Usually it
13 is as simple as weighing a portion of the sample before
14 and after drying and then mathematically correcting an
15 analytical concentration.

16 With respect to implementation, we propose
17 that this change become effective for analytical
18 results generated after the effective date of this
19 rule. In other words, the Agency will accept data
20 generated prior to the effective date on either a wet
21 or dry weight basis unless otherwise specified by prior
22 permit or regulation. This should make the transition
23 relatively painless.

24 This concludes my verbal testimony. My

L.A. REPORTING
(312) 419-9292

70

1 written testimony and qualifications have been
2 previously filed with the Board.

3 MS. GEVING: Thank you, Mr. O'Brien.

4 Mr. Eastep.

5 MR. EASTEP: Thank you.

6 My name is Larry Eastep. I'm manager of the
7 Remedial Project Management Section with the Agency.
8 And as part of my responsibilities, I am responsible
9 for the administration of the voluntary site
10 remediation program and the remediation of state sites.
11 By state sites, I mean sites that are managed by the
12 Illinois EPA and that are not federal sites. Federal
13 sites might include super fund or federal facilities.

14 Today I'd like to talk about the changes to
15 what we've proposed for PCBs, or Polychlorinated
16 Biphenyls. We've made three changes in the
17 regulations.

18 These changes were made principally so that
19 remedial applicants would be able to work within both
20 the federal requirements under TSCA for PCBs as well as
21 the Site Remediation Program.

22 We didn't try to incorporate TSCA into these
23 changes because quite frankly it's much too
24 complicated. I don't know if we could have actually

L.A. REPORTING
(312) 419-9292

71

1 done it even if we had really tried. It would have
2 been a nightmare in terms of implementation. And there
3 would probably have been some things within TSCA that
4 are not necessarily applicable to the way we do things
5 under the 742 rules.

6 Briefly there were three areas where we
7 changed things. Under Subpart C for exposure route or
8 exposure pathway exclusions, we put a limitation of
9 50 parts per million in there. The 50 part per million
10 limit is essentially a threshold under the remediation
11 waste definition that USEPA uses in defining TSCA waste
12 under 40 CFR Part 761.

13 If a person had less than 50 ppm, they would
14 be eligible to exclude a pathway under the TACO rules.
15 However, if they were over 50 ppm, that doesn't mean
16 that they're necessarily out of TACO. They could
17 always go to Tier 3 and still address their
18 contamination.

19 We also changed Tier 3. And under Tier 3
20 we've simply required that they address 40 CFR 761 if
21 they have PCBs present.

22 The final change that we made was under
23 Tier 1. The Tier 1 limit for PCBs is now 1 ppm.
24 However, we've gone to the footnote and added a

L.A. REPORTING
(312) 419-9292

72

1 footnote that if they want to go above one part per
2 million and operate under Tier 3, that they have to
3 address the requirements of 40 CFR 761, which is a TSCA
4 rule.

5 So in essence what we have tried to do is
6 allow persons going through TACO to also comply with

7 the federal TSCA requirements. The fact that they
8 comply with TSCA does not mean they don't have to
9 require or don't have to comply with some of the TACO
10 requirements as well.

11 One example maybe of this is that the way the
12 federal TSCA rule is set up, a cleanup objective for
13 what they call a high occupancy area is one part per
14 million. And a high occupancy area under the federal
15 rule is I think 6.7 hours per week. They can, however,
16 go from one part to ten parts if they have a cap, which
17 is ten inches of soil meeting a certain specification
18 or six inches of concrete.

19 They have another requirement for what they
20 refer to as a low occupancy area, and the limit there
21 is 25 parts per million. But low occupancy under their
22 definition is less than 6.7 hours per week. So the
23 duration of somebody being at a site does not
24 necessarily differentiate the site from being

L.A. REPORTING
(312) 419-9292

73

1 residential versus industrial.

2 And this is probably one of the simplest
3 examples that I could give where someone might try and
4 argue that being a low occupancy area under the federal
5 rule might qualify them as an industrial site. And
6 they just aren't comparable.

7 With that I think that concludes my
8 testimony. And I believe my written testimony has
9 already been submitted.

10 MS. GEVING: Thank you, Mr. Eastep.

11 Mr. Nickell.

12 MR. NICKELL: My name is Christopher Nickell. I'm
13 a project manager with the Leaking Underground Storage
14 Tank Section in the Bureau of Land and the Illinois
15 EPA, and I've been in that position since August of
16 1993.

17 I'll be testifying on changes, most of which
18 are clarifications because I am in project management
19 and have been a member of this group for the 742
20 regulations. I field calls on a daily basis resulting
21 in confusion from the outside for explanation of the
22 rule. So therefore most of my changes are a result of
23 my experience with what people need to hear on the
24 outside for clarification.

L.A. REPORTING
(312) 419-9292

74

1 The first of which is 742.810(a), the word
2 groundwater has been added to the description of S sub
3 w and S sub d. This addition was to clarify that these
4 two variables are dependent on the size, meaning the
5 width and depth of the groundwater plume and not the
6 soil contamination.

7 742.810(b) has been a wording change.

8 Actually the whole 810(b) has been reworded; however,
9 it has not been changed for its meaning, merely just
10 clarification.

11 Appendix C, Table A for Equations S26 and
12 S28, originally the notes provided in the table for
13 these two equations requested that the area of the
14 contamination need to be known for the use of that
15 equation. We are removing that and stating now that
16 only the depth of the source need to be required.

17 In my written testimony submitted, I have
18 provided the derivation of that equation to show that
19 the area actually falls out of the equation during the
20 derivation. So we are comfortable that merely knowing
21 the depth of the source is adequate for the use of
22 those maximum equations.

23 Appendix C, Table B, for the description of
24 the parameter $d_{sub s}$, clarification has been added to

L.A. REPORTING
(312) 419-9292

75

1 the description of this parameter. The phrase vertical
2 thickness of contamination has been added to clarify
3 the fact that the term does not refer to the depth to
4 the source.

5 It was a common misconception that that
6 parameter, if contamination -- if you had contamination
7 from three foot to ten foot, it was a common mistake

8 that people would put three foot in as a depth and
9 source when actually what we meant was the thickness,
10 not the depth to the beginning of the contamination.
11 So that again was just for clarification.

12 And finally Appendix C, Table C,
13 Equations R15 and R26. This again is a change to the
14 note. Through experience -- I'll read my written
15 testimony there to start this out.

16 An addition has been made to the notes
17 provided for equations R15 and R26 to address the
18 possibility of the equations not accurately predicting
19 downgradient concentrations in the presence of a
20 confining layer. This concern revolves around the
21 final ERF terms in these equations, which accounts for
22 dispersion in the vertical plane.

23 The Illinois Pollution Control Board stated
24 on Page 51 of the Second Notice for the proposed

L.A. REPORTING
(312) 419-9292

76

1 Part 742 rules, April 17th, 1997, "The upward vertical
2 direction is limited in distance. The contamination is
3 not going to seep back into the soil. There cannot be
4 infinite dispersion in the vertical direction because
5 of the restricted upward distance."

6 The Board was discussing there the change
7 from a 4 to a 2 in the denominator of the vertical
8 dispersion ERF term for equations R15 and R26. The

9 Agency has come to the conclusion that this also holds
10 true for some situations in the downward direction.

11 What I was discussing there was in the
12 original model a factor of 4 was used. As a
13 contamination migrated in that direction, it could
14 disperse both upward and downward as it migrated.
15 Although we determined that since it was at the surface
16 of the water table it could not migrate up, and so we
17 changed that term to a 2.

18 What I am testifying to here today is that
19 that also can occur in a downward direction. If you
20 have a confining layer which restricts groundwater's
21 depth, then that contamination cannot also continue to
22 migrate in the vertical direction downward.

23 Therefore the Agency would like to reserve
24 the right to exclude particular sites from using this

L.A. REPORTING
(312) 419-9292

77

1 vertical dispersion factor in equations R15 and R26 or
2 both if geological conditions warrant such an action.
3 And that concludes my testimony.

4 MS. GEVING: Thank you, Mr. Nickell.

5 Ms. Sullinger.

6 MS. SULLINGER: Thank you.

7 My name is Connie Sullinger. I'm an
8 Environmental Protection Specialist IV with the IEPA's

9 Office of Chemical Safety, and I've been with the
10 Agency since 1985.

11 My major duties include development and use
12 of procedures for human and environmental exposure
13 assessments and risk assessments, review of
14 toxicological data and hazardous information in support
15 of Agency programs and actions, and critical review of
16 risk assessment documents submitted to the Agency for
17 various site investigations and cleanup activities. I
18 have a bachelor of science in medical technology and a
19 master's degree in public health.

20 My testimony is in support of the changes in
21 the concentrations of arsenic and background soils that
22 are listed in Section 742, Appendix A, Table G and the
23 changes made in the soil objectives for the ingestion
24 route of exposure for arsenic and Footnote T in

L.A. REPORTING
(312) 419-9292

78

1 Appendix B, Tables A and B.

2 The Agency is currently proposing to change
3 the background concentrations in Table G. The Agency
4 is proposing to use the 95th percentile of background
5 concentration for arsenic in the state, which have been
6 determined to be 13 milligrams per kilogram for MSAs
7 and 11.3 for counties outside MSAs.

8 In addition, the Agency is proposing to
9 delete the residential industrial commercial

10 remediation objectives for the ingestion route of
11 exposure for arsenic and add the footnote.

12 And the end result is that the risk-based
13 remediation objectives for the ingestion route will be
14 removed and the 95th percentile background
15 concentrations included.

16 The Agency is recommending these changes due
17 to the large number of sites in Illinois where
18 naturally occurring levels of arsenic exceed the
19 risk-based remediation objectives.

20 And that concludes my statements.

21 MS. GEVING: Thank you.

22 Mr. Clay.

23 MR. CLAY: My name is Doug Clay. I'm the manager
24 of the Leaking Underground Storage Tank Section from

L.A. REPORTING
(312) 419-9292

79

1 the Bureau of Land, the Illinois EPA.

2 I have been in my current position since
3 September of '94. I have been employed with the
4 Illinois EPA since 1983. I have a civil engineering
5 degree from the University of Illinois, and I am a
6 registered professional engineer and have been so since
7 1989.

8 This is a summary of my written testimony in
9 support of the proposed amendments establishing

10 remediation objectives for Methyl tertiary-butyl ether,
11 commonly referred to as MtBE, in both soil and
12 groundwater.

13 MtBE has become a national health issue.
14 MtBE is an additive in gasoline that has been used
15 since the late 1970s. It is added as an octane
16 enhancer to meet Clean Air Act requirements.

17 It has been showing up more and more in
18 community water supply wells. In Illinois 26 community
19 water supply wells have detected MtBE, and four wells
20 have discontinued use due to contamination with MtBE.

21 Please note my testimony refers to three
22 wells discontinuing use and then lists four. It should
23 actually have referred to four wells discontinuing use.

24 I refer to Tom Hornshaw's testimony with

L.A. REPORTING
(312) 419-9292

80

1 regard to health issues associated with MtBE. The
2 research with regard to cancer-causing potential of
3 MtBE is being reviewed by USEPA. We will continue to
4 watch for their findings.

5 These amendments propose a Tier 1 ground
6 water remediation objective of 70 parts per billion in
7 groundwater and a Tier 1 remediation objective of
8 320 parts per billion for the soil component of the
9 groundwater ingestion route.

10 There are also Tier 1 soil ingestion and

11 inhalation remediation objectives proposed. However,
12 the groundwater route will normally drive the cleanups
13 for this compound.

14 I also refer to amendments which will be
15 proposed to the Board in the near future for
16 35 Illinois Administrative Code Part 620 and 732. I
17 use the term action level to describe a 20 part per
18 billion concentration that is being proposed in the
19 Part 720 amendments that will be proposed to the Board.
20 The 20 part per billion reference is more appropriately
21 termed preventative and notice response level.

22 There are also a number of attachments to my
23 testimony to support the position that MtBE should be
24 regulated and subject to the proposed remediation

L.A. REPORTING
(312) 419-9292

81

1 objectives.

2 MS. GEVING: Thank you, Mr. Clay.

3 Ms. Hurley.

4 MS. HURLEY: Thank you.

5 My name is Tracey Hurley. I'm an
6 environmental toxicologist with the Toxicity Assessment
7 Unit within the Office of Chemical Safety of the
8 Illinois Environmental Protection Agency. I have been
9 with the Agency for 11 years providing expertise to the
10 Agency in the area of environmental toxicology.

11 My responsibilities include development and
12 use of procedures for human and environmental exposure
13 assessments and risk assessments, review of
14 toxicological data and hazard information in support of
15 agency programs and actions, and review of remedial
16 investigation and risk assessment documents submitted
17 to the Agency.

18 My testimony concerns revisions to
19 Appendix A, Table H, and Appendix B, Tables A, B, E,
20 and F. The Agency is proposing the revisions to
21 Appendix A, Table H, and Appendix B, Tables A, B, and E
22 to reflect the latest update, Update III, to USEPA's
23 SW-846 test methods for evaluating solid waste,
24 physical/chemical methods.

L.A. REPORTING
(312) 419-9292

82

1 Update III changed some practical
2 quantitation limits or PQLs and was previously
3 incorporated by reference in Section 742.210. However,
4 the numerical changes in the detection limits were not
5 reflected in the TACO tables.

6 The proposed change to Appendix B, Table F,
7 Footnote B clarifies the method used to derive the
8 groundwater remediation objective used to calculate
9 Tier 1 soil remediation objectives.

10 And my prefiled testimony contained, as
11 Exhibit 1, a table of TACO chemicals affected and their

12 updated PQLs. And since I have found some errors in
13 Exhibit 1.

14 The SW-846 method for 1,3-Dichloropropylene
15 (cis & trans) should be 8260B.

16 For N-Nitrosodiphenylamine, the groundwater
17 PQL should be 0.003 milligrams per liter, and the soil
18 PQL should be 0.003 milligrams per kilogram.

19 For N-Nitrosodi-n-propylamine, the
20 groundwater PQLs should be 0.0018 milligrams per liter,
21 and the soil PQLs should be 0.0018 milligrams per
22 kilogram.

23 For vinyl chloride, the groundwater PQL
24 should be 0.0002 milligrams per liter, and the soil

L.A. REPORTING
(312) 419-9292

83

1 PQLs should be 0.0002 milligrams per kilogram.

2 The correct values have been given in the
3 proposed amendments to Appendix A, Table H, and
4 Appendix B, Tables A, B, and E.

5 And at this time I would also like to propose
6 an additional amendment to Appendix A, Tables A and B.
7 In both Tables A and B the ADL for
8 1,2-Dibromo-3-chloropropane should be changed from an
9 asterisk to 0.005 milligrams per kilogram.

10 And also in Appendix B, Table B, the ADLs for
11 4-Chloroaniline, N-Nitrosodiphenylamine, and

12 Pentachlorophenol have been deleted. The deleted ADLs
13 should be replaced with an asterisk and not left blank.

14 And this concludes my oral summary today. My
15 qualifications and written testimony have been prefiled
16 with the Board.

17 MS. GEVING: Thank you.

18 THE HEARING OFFICER: Ms. Geving, before you
19 proceed, are those changes reflected in writing
20 anywhere that you can present to the Board?

21 MS. GEVING: Tracey has a copy that she can
22 present both to the court reporter and to the Board.

23 THE HEARING OFFICER: Thank you.

24 MS. GEVING: Mr. King.

L.A. REPORTING
(312) 419-9292

84

1 MR. KING: I had an opportunity to talk earlier
2 about the ELUCs, and that was the primary part of my
3 testimony. The rest of it I think is fairly
4 straightforward, so I wasn't going to say anything
5 else.

6 MS. GEVING: Thank you.

7 Dr. Hornshaw.

8 DR. HORNSHAW: Good morning. My name is Thomas C.
9 Hornshaw. I'm a senior public service administrator
10 with the Illinois EPA, and I'm also the manager of the
11 Toxicity Assessment Unit within the Office of Chemical
12 Safety.

13 I participated in the development of the
14 original Part 742 TACO proposal to the Board and
15 testified concerning my contributions to that proposal
16 in the Board hearings regarding TACO.

17 This is a summary of my written testimony
18 filed for this proceeding.

19 My testimony regarding the proposed
20 amendments to Part 742 falls into three broad
21 categories. Additions to the Tier 1 tables,
22 modifications to the Tier 1 tables due to updated
23 information for the chemicals in the tables, and
24 clarifications and corrections to the text in the rule

L.A. REPORTING
(312) 419-9292

85

1 and the associated tables of the appendices.

2 First, the additions. There are two
3 additions to the Tier 1 tables of TACO. The first
4 pertains to the chemical Methyl tertiary-butyl ether,
5 or MtBE, which the Agency is proposing to add to the
6 list of chemicals in Tier 1 because of its occurrence
7 at a number of gasoline-related cleanups and increased
8 health concerns at the national level.

9 Doug Clay has testified regarding the need
10 for adding the chemical to Tier 1. My testimony
11 provides the toxicological bases for the proposed
12 remediation objectives and discusses MtBE's

13 physical/chemical constants, particularly its First
14 Order Degradation Constant.

15 Specifically, the Agency believes that a
16 First Order Degradation Constant less than that of
17 Benzene, and possibly zero, may be warranted for MtBE.
18 We request that the Board give serious consideration to
19 the most appropriate value for this MtBE constant.

20 The second addition pertains to the chemical
21 Vanadium which, through an oversight in the original
22 rulemaking, does not have a remediation objective for
23 Class II groundwater. A value of 0.1 milligram per
24 liter is proposed as the Class II objective for

L.A. REPORTING
(312) 419-9292

86

1 groundwater and for the leach test soil objective for
2 the migration to groundwater pathway.

3 Second, the modifications. There are
4 numerous modifications that have been identified as
5 being necessary to the appendices of the TACO rule for
6 a variety of reasons, including:

7 Appendix A, Table A - updating the soil
8 saturation concentration for total Xylenes;

9 Appendix A, Tables E and F - specifying when
10 only the ingestion or inhalation pathway applies to
11 mixtures of similar-acting chemicals;

12 Appendix B, Tables A and B (the Tier 1
13 tables) - updating the Tier 1 values in response to

14 changes in the toxicity information in the USEPA
15 database, correcting some minor footnoting problems,
16 and changing the basis for the construction inhalation
17 objectives from the soil saturation concentration to a
18 workplace air criterion for the chemical
19 1,1-Dichloroethylene;

20 And Appendix B, Tables C and D - extending
21 the pH-specific migration to groundwater tables to pH
22 of 9 for 15 chemicals.

23 Third, clarifications and corrections.

24 Through its own efforts and as a result of

L.A. REPORTING
(312) 419-9292

87

1 questions from users of the TACO rules, the Agency has
2 become aware of several facets of the rules that need
3 clarification or correction, including:

4 Section 742.225(e) - allowing random numbers
5 between zero and the detection limit instead of
6 one-half the detection limit to be used as the
7 environmental concentration in certain cases;

8 Sections 742.700(b)(2)(A), 742.(c)(2)(A), and
9 Appendix C, Table A - replacing the word volatiles with
10 organic contaminants and mercury in the inhalation
11 pathway equations;

12 Sections 742.710(d)(1)(B), 742.715(d),
13 742.805(a)(3)(B), 742.805(a)(4), and 742.810(b) -

14 deleting references to the health advisory developed
15 pursuant to 35 Illinois Administrative Code 620,
16 Subpart F;

17 Appendix B, Table A - correcting what appears
18 to be a USEPA error in the inhalation pathway
19 remediation objective for 1,4-Dichlorobenzene.

20 Appendix C, Tables B and D - standardizing
21 the language and presentation regarding the soil-water
22 partition coefficient for the soil screening level and
23 RBCA equations in these tables;

24 And Appendix C, Tables I and J - adding

L.A. REPORTING
(312) 419-9292

88

1 missing units to these Tables' headings.

2 The changes for vinyl chloride in Errata
3 Sheet 1 are new to this proposal and reflect the recent
4 issuance of new toxicity information from USEPA that is
5 new since we put together the draft of the new TACO.

6 Several of the changes to TACO listed above
7 were not entered correctly in the draft of the TACO
8 amendment submitted to the Board and have been
9 corrected in Errata Sheet 1.

10 I would also note that our word processing
11 capabilities regarding Greek symbols continues to be
12 unreliable, and some entries in the errata sheet
13 address these problems. In fact, we still need to make
14 a correction to a correction in Errata Sheet 1.

15 If you'll turn to Page 2 in the entry for
16 742.710(d)(1)(B), please change the characters inside
17 the parentheses in the third line from Capital B
18 subscript Greek RHO to Greek RHO subscript lower case
19 b.

20 This concludes my summary of my testimony.

21 MS. GEVING: That would include the Agency's
22 summary of testimony.

23 THE HEARING OFFICER: At this time would you like
24 to submit each of the individual prefiled testimony as

L.A. REPORTING
(312) 419-9292

89

1 a group exhibit perhaps?

2 MS. GEVING: Yes, that would be fine. Would that
3 also then include the summary submitted by Tracey
4 Hurley as well as her corrected Exhibit 1?

5 THE HEARING OFFICER: Yes. We'll accept those as
6 if read in their entirety into the record. They'll be
7 marked as an exhibit and attached to the transcript by
8 the court reporter.

9 MS. GEVING: Would you like Errata Sheet No. 1 to
10 be a part of that as well?

11 THE HEARING OFFICER: I think so, yes.

12 (Whereupon, Illinois EPA Group
13 Exhibit No. 1 was marked for
14 identification.)

15 THE HEARING OFFICER: We'll proceed with
16 questioning for the Agency panel of witnesses.
17 Actually what I'd like to try to do is stay as close to
18 the order of presentation as possible. It seems to
19 follow through chronologically the rule itself.

20 I understand that probably won't be possible
21 in all cases. But if possible, let's try to follow
22 that same order. That would put Mr. Sherrill in the
23 hot seat first.

24 So we'll begin with questions from the Board

L.A. REPORTING
(312) 419-9292

90

1 and the Board's technical staff, and then we'll
2 proceed, as we did earlier this morning, with questions
3 from the public.

4 MS. LIU: Good afternoon, Mr. Sherrill. What kind
5 of Tier 3 demonstration does the Agency envision for
6 sites where the soil saturation limit is exceeded?
7 Would you use modeling or historical evidence or
8 something along those lines?

9 MR. SHERRILL: I'm thinking of two examples of --
10 there's certain types of contaminants called PNAs. You
11 could have a PNA and a clay layer -- now, this is above
12 the groundwater table -- and someone may be able to
13 come in and show and demonstrate there's some type of
14 low-level PNA that does exceed the soil saturation
15 limit; however, they may propose an engineered barrier

16 on top of this PNA, and there may be 20, 30, 40 feet of
17 tight clay in the unsaturated zone below this PNA
18 contamination.

19 Given that demonstration, there would be
20 little reason to think -- and with the appropriate
21 institutional control and engineered barrier -- that
22 that PNA would pose a risk to human health.

23 DR. HORNSHAW: I might add that we already have
24 examples where this has happened with some of the

L.A. REPORTING
(312) 419-9292

91

1 manufactured gas plant sites that have been under
2 investigation all around Illinois that we have
3 historical evidence of when a plant's operated.

4 In some cases there has been -- maybe a
5 century has passed and the contamination has moved very
6 little through tight clay. In those cases we're
7 comfortable with putting a cap over the top of it and
8 we're pretty confident it is not going to cause a
9 threat to groundwater below as one example.

10 MS. McFAWN: So that would be an example of where
11 you use the historical evidence?

12 DR. HORNSHAW: Yes. And all the analytical data
13 that shows that it has not moved away from the original
14 site where it was generated or stored.

15 MS. LIU: Would the Agency accept valid

16 demonstrations where there's actually free product
17 present?

18 MR. SHERRILL: The term free product can mean a
19 lot of things to a lot of people. And for free product
20 in groundwater, within TACO we have -- they have to
21 make a demonstration, the remedial applicant or person,
22 that they have to remove as much free product as
23 possible.

24 There could be the point, in the example I

L.A. REPORTING
(312) 419-9292

92

1 gave before, that I don't know if you would necessarily
2 call it a free product if you had a contaminant that
3 exceeded its soil saturation limit and it was in the
4 unsaturated zone.

5 I mean, as groundwater's infiltration is
6 going through it, yes, it's being in contact with
7 moisture, but whether you want to call it a free
8 product... A lot of times people would consider it a
9 free product once it hits the groundwater table.

10 But we have used definitely, kind of the
11 context of your question, when the soil saturation
12 limit is exceeded, it tends to indicate that there may
13 be a free product there.

14 So if you're necessarily asking could someone
15 leave a free product and then under a Tier 3 -- it's my
16 understanding, and I'll let the rest of the Board --

17 what I'm proposing is that someone could propose that,
18 yes. And I don't know if, Mr. Eastep, do you want
19 to...

20 MR. EASTEP: You're fine.

21 MR. O'BRIEN: Essentially the problem with the
22 soil saturation limit arises due to the mathematical
23 model that's used in Tier 1 and 2 in that it's a
24 single-phase flow model and doesn't account for

L.A. REPORTING
(312) 419-9292

93

1 multiple phases. When something exceeds the soil
2 saturation limit, it would be present in multiple
3 phases.

4 Models are becoming more sophisticated, and
5 we would like the availability at Tier 3 to consider
6 more sophisticated models that look at dual-phase flow
7 that may be able to demonstrate that contaminants won't
8 migrate beyond the point of compliance at a level that
9 would be of concern.

10 THE HEARING OFFICER: Are those all the questions
11 from the Board on that issue?

12 Anyone from the audience?

13 MS. McFAWN: Could you explain what a dual-phase
14 flow is?

15 MR. O'BRIEN: Well, if you have oil and water and
16 they don't -- they're not mixable, they don't mix, so

17 you have two different phases. You have your oil phase
18 and your water phase. And they would have flow
19 characteristics, different characteristics with respect
20 to adhesion to soil particles that they pass. There's
21 a difference in buoyancy between an oil phase and a
22 water phase. And that all affects the flow pattern.

23 MS. McFAWN: So they exceed the soil saturation,
24 and you're saying that the models are sophisticated

L.A. REPORTING
(312) 419-9292

94

1 enough to project what will happen to each of the two
2 phases?

3 MR. O'BRIEN: I'm saying that the model that we
4 currently use to develop Tier 1 and Tier 2 is not
5 sophisticated enough to account for that. And the
6 reason that we put the soil saturation limit in in the
7 first place was to make it clear that there was a
8 physical limit to the applicability of this
9 mathematical model that was used in Tier 1 and Tier 2.

10 As time goes on, mathematical models become
11 more sophisticated. I don't know that we know that
12 there is one now. But we anticipate that someone might
13 be able to make a demonstration that they had a model
14 that was applicable in a particular situation, and we
15 think the rule should be changed to allow us to
16 consider that at a Tier 2 level so that we could
17 approve the use of a model for this purpose.

18 MS. McFAWN: Thank you.

19 THE HEARING OFFICER: Anything else?

20 I think the next subject matter we addressed
21 were the proposed changes to 742.225. So we'll address
22 any questions now with regard to those proposed
23 changes.

24 MS. KEZELIS: Mr. O'Brien, with respect to the

L.A. REPORTING
(312) 419-9292

95

1 soil sample concentration reporting change that you
2 proposed to dry weight, you don't propose to specify
3 how one achieves a dry state?

4 MR. O'BRIEN: No, there are standard laboratory
5 methods. It depends on the type of sample. For
6 instance, for samples that would not be degraded by
7 heating, the typical method is to heat the sample.

8 But there are also other methods of
9 determining moisture content. And once you've
10 determined the moisture content on the subset of the
11 sample, then you can just mathematically correct the
12 concentration that's determined by another analytical
13 method. I don't propose to -- it's not necessary.
14 It's common analytical practice to apply the
15 appropriate method of determining moisture content in
16 correcting the sample weight.

17 MS. KEZELIS: I simply wanted to clarify that.

18 Thank you.

19 MS. LIU: Mr. O'Brien, how much variability would
20 you estimate would typically occur between samples of
21 the same material with varying moisture contents?

22 MR. O'BRIEN: Well, you can change a samples
23 weight by, I don't know, I suppose at least 30 percent
24 between a dry weight and a saturated weight. It

L.A. REPORTING
(312) 419-9292

96

1 depends upon the amount of pore space in the sample
2 before you would have -- as to how much water it would
3 absorb.

4 MS. LIU: Would that variability be enough to tip
5 the scales one way or the other in terms of meeting a
6 remediation objective?

7 MR. O'BRIEN: Yes, it would.

8 MS. LIU: Thank you.

9 THE HEARING OFFICER: Mr. Rieser.

10 MR. RIESER: What practical problem was this
11 proposed change designed to address?

12 MR. O'BRIEN: A practical problem was that one set
13 of samples would be taken, and that showed that some
14 objectives were met but maybe not others and some
15 further work was done. The second set of samples was
16 taken, and things that met before didn't later. And it
17 was due to the fact that the samples were taken at
18 different times or had different moisture contents.

19 program, that we should clarify dry weight. It's a way
20 of normalizing the data so that if two people go out
21 and take a sample they're going to come out with the
22 same concentration if it contains the same amount of
23 contaminant.

24 MR. RIESER: The Agency has been receiving soil

L.A. REPORTING
(312) 419-9292

98

1 samples from various sites for many years both in the
2 Underground Storage Tank Program and the Remedial
3 Project Management Program, correct, prior to the
4 proposal of this regulation in 1997?

5 MR. O'BRIEN: That's correct.

6 MR. RIESER: Were there sites where the
7 variability among samples based on the fact that they
8 used wet weight rather than dry weight was such that
9 the Agency felt that they had to require a dry weight
10 sampling only to identify the scope of the problems at
11 the site?

12 MR. O'BRIEN: With respect to those programs, I
13 don't work in them. I'm not aware of any specific
14 sites where that was a problem. In a lot of cases,
15 analytical results, it wasn't really clear whether they
16 were on a dry or wet weight basis in terms of how they
17 were reported out of a lab.

18 I am familiar with a couple of instances
19 where we split samples with a party on a spill and our

20 lab got one result and the party got another result and
21 tried to determine why there was a difference. It was
22 the fact that one was poured in wet weight and another
23 in dry weight. Problems arise if you can't normalize
24 the samples on a constant weight basis.

L.A. REPORTING
(312) 419-9292

99

1 MR. RIESER: Does the USEPA require, through any
2 of its standard methods, that all soil samples be
3 recorded on a dry weight basis or only for very
4 specific programs like the PCB program?

5 MR. O'BRIEN: It's program specific determining
6 upon the use to which the data is put. The USEPA TSCA
7 program, again, the rules require a dry weight basis.
8 And in their Super Fund Program, their laboratory
9 contracts require reporting on a dry weight basis.

10 MR. RIESER: So when they ask a laboratory to
11 perform samples on their behalf, they request it back
12 on a dry weight basis?

13 MR. O'BRIEN: That's correct. The Illinois EPA's
14 laboratories report its results on a dry weight basis,
15 and we require our laboratories to report it on a dry
16 weight basis.

17 Primarily as a result of discussions that we
18 had pursuant to looking into this matter, our
19 laboratory said but we just assumed that these things

20 are being reported to us on a dry weight basis. That's
21 standard practice in analytical chemistry. But in
22 checking with our laboratories, they found out that it
23 would help to verify our contracts to specify that.

24 MR. RIESER: For the quality assurance programs

L.A. REPORTING
(312) 419-9292

100

1 that the USEPA requires at RCRA sites, for example,
2 they don't require reporting on a dry weight basis as
3 part of those quality assurance programs; is that
4 correct?

5 MR. O'BRIEN: I can't speak to that.

6 MR. RIESER: And the IEPA, in its quality
7 assurance programs, wouldn't require -- as part of its
8 work plans for super fund sites, RCRA sites, it doesn't
9 require dry weight sampling, correct?

10 MR. EASTEP: I thought that we did at the sites
11 where Illinois EPA had believed were super fund
12 enforcement sites. I thought that we did. But I've
13 been out of the program for about a year-and-a-half, so
14 I'd have to check.

15 MR. RIESER: The American Society for Testing of
16 Materials also has various methodologies that it
17 publishes for soil sampling, correct?

18 MR. O'BRIEN: Yes, that's correct.

19 MR. RIESER: And these are viewed as reliable
20 methodologies that are used by state and federal

21 agencies?

22 MR. O'BRIEN: Correct.

23 MR. RIESER: ASTM does not require, as part of a
24 soil sampling methodology of dry weights, that samples

L.A. REPORTING
(312) 419-9292

101

1 always be reported on a dry weight basis?

2 MR. O'BRIEN: I could not find any ASTM
3 methodology that really addressed the issue
4 substantively. They didn't require reporting on a wet
5 weight, dry weight. They didn't talk about reporting
6 results on a weight basis to that degree of detail.

7 MR. RIESER: You said that this rule would apply
8 to any samples taken after the effective date of the
9 regulation; is that correct?

10 MR. O'BRIEN: What I'm referring to is these
11 proposed amendments.

12 MR. RIESER: The effective date of these proposed
13 amendments, thank you. So these would apply to sites
14 that are already in, for example, site remediation
15 programs even though they have been taking samples on a
16 different basis or a basis where the dry/wet basis
17 hasn't been specified?

18 MR. O'BRIEN: That's our proposal.

19 MR. RIESER: Is there a language to that extent
20 proposed in the regulation to the Board? In the

21 proposal to the Board I should say.

22 MR. O'BRIEN: No, I don't think it says that
23 specifically.

24 MR. KING: I'm confused. Are you crossing over

L.A. REPORTING
(312) 419-9292

102

1 between regulatory proposals?

2 MR. RIESER: No, no, no.

3 MR. KING: I mean, F says all soil samples
4 collected after the effective date of this
5 Subsection (f) shall be on a dry weight basis for the
6 purpose of demonstrating compliance. That's 225(f.)

7 MR. RIESER: So even if a site has developed a
8 remedial action plan, has been taking samples based on
9 the remediation action plan, the Agency has been
10 accepting those samples today, and they're prepared to
11 submit -- and they have got like one more round of
12 sampling, any samples from this point forward would be
13 taken on this other specified basis even though it
14 hasn't been a previous requirement?

15 MS. GEVING: After the effective date of the
16 rules, which would be the date that they're adopted.
17 We wouldn't require them --

18 MR. RIESER: For sites where samples have been
19 collected on where this hasn't been specified at that
20 site, they would now be specified for the first time
21 even though people have been taking samples on a

22 different basis for in some cases many years; is that
23 correct?

24 MR. O'BRIEN: Yes, that's correct.

L.A. REPORTING
(312) 419-9292

103

1 THE HEARING OFFICER: Yes. Would you please state
2 your name and who you're here on behalf of.

3 MS. STEINHOOR: Beth Steinhour, Weaver Boos &
4 Gordon.

5 THE HEARING OFFICER: And you may want to spell
6 that or provide a business card to the court reporter.

7 MS. STEINHOOR: I've done my sampling, and I'm now
8 in the effective date of the rule. And I'm using my
9 previous sampling to demonstrate compliance to do my
10 final closure plan. Will I now have to have the data
11 on the dry weight basis?

12 MR. O'BRIEN: No. It says all soil samples
13 collected after the effective date of the subsection.
14 So if you collected them before that subsection, we
15 will accept those.

16 MS. STEINHOOR: For purposes of demonstrating.

17 MR. O'BRIEN: For purposes of demonstrating
18 compliance.

19 THE HEARING OFFICER: Mr. Rieser.

20 MR. RIESER: Just a couple more questions.

21 The samples on a wet basis as we've been

22 talking are samples that accurately can reflect the
23 conditions in the field at the time they were taken,
24 correct?

L.A. REPORTING
(312) 419-9292

104

1 MR. O'BRIEN: Yes.

2 MR. RIESER: And we're talking about a number
3 that's being used to determine the compliance with TACO
4 levels which are supposed to reflect levels that are
5 protective of healthy people exposed to conditions as
6 they are in the field, correct?

7 MR. O'BRIEN: Yes.

8 MR. RIESER: So the samples taken on a wet basis,
9 shall we say, or not on a dry weight basis would
10 actually be reflective of those conditions to which
11 people are exposed, correct?

12 MR. O'BRIEN: People exposed at that time but
13 perhaps not at future points in time when the field was
14 dryer.

15 MR. RIESER: Or when it was wetter.

16 MR. O'BRIEN: Right. It's a standard practice to
17 report things on a dry weight basis. I don't have any
18 particular wet weight that would serve as a surrogate
19 for all soils in all places to say that you have to
20 correct it for 30 percent moisture content or
21 something. The standard approach to dealing with
22 normalizing samples based on moisture content is to use

23 the dry weight basis.

24 MR. RIESER: Thank you.

L.A. REPORTING
(312) 419-9292

105

1 THE HEARING OFFICER: I have a couple of quick
2 follow-up questions as well.

3 Is there a cost differential between running
4 a sample on a dry weight basis as opposed to wet
5 weight?

6 MR. O'BRIEN: Well, as I said, the procedure for
7 determining moisture content is relatively simple and
8 would be a minor component of any cost differential,
9 would be fairly minor.

10 THE HEARING OFFICER: And if you're running a
11 sample on a dry weight as opposed to wet weight, are
12 the contaminant levels typically going to be higher
13 with a dry weight sample? Is that the difference that
14 you've been seeing?

15 MR. O'BRIEN: Moisture adds weight, so if there's
16 moisture in there, it's going to add weight in the
17 denominator. And so you would always have a slightly
18 lower concentration if you had moisture in the sample
19 than you would if you had a dry sample.

20 But as I said, the problem arose from the
21 fact that you can take the same sample at two different
22 times, and depending on the climatic conditions at the

23 time when you take the sample, you can end up with two
24 different concentrations. We're proposing that we

L.A. REPORTING
(312) 419-9292

106

1 normalize this in a manner that's consistent with
2 standard analytical practice.

3 THE HEARING OFFICER: Thank you.

4 Mr. Eastep.

5 MR. EASTEP: Can I add, when we were preparing
6 this, we informally surveyed a number of the
7 consultants that we deal with, and most of them are
8 reporting on a dry weight basis now. Whether they
9 stated it or not in the data, they are collecting
10 information and reporting it on a dry weight basis.

11 I believe in one of the SRAC meetings Hanson
12 Engineers indicated that they were doing that, and they
13 certainly do a lot of remedial work.

14 THE HEARING OFFICER: Thank you.

15 Anything else on this particular issue from
16 anyone?

17 Yes.

18 DR. HORNSHAW: It might help if I can clarify the
19 toxicology that underlies all of this. All of the
20 Tier 1 values ultimately go back to an exposure to the
21 human body, which is based on milligrams of a chemical
22 per kilogram of body weight. And what we're concerned
23 about is the total number of milligrams that a person

24 is going to be exposed to either by inhalation or

L.A. REPORTING
(312) 419-9292

107

1 ingestion or drinking water.

2 And in the case of the soil objectives, we
3 put it on a milligram per kilogram of soil. And that's
4 kind of independent of the water content of the soil.
5 We're really concerned about the milligrams of chemical
6 that the person is exposed to. And under worst case
7 conditions, that's milligrams per kilogram of dry
8 weight.

9 Anything that's added by the water as a
10 weight of the total soil sample is mostly irrelevant
11 other than the fact that there's water there and it may
12 change a little bit how much the chemical is processed
13 by the body.

14 But usually the water is just absorbed by the
15 body and either excreted or becomes part of the water
16 that's normally in the body. And the chemical that's
17 there then goes and does its dirty work. And that's
18 what we're trying to protect.

19 So milligram per kilogram dry would be the
20 most conservative way of doing it and the most
21 protective of human health.

22 THE HEARING OFFICER: Thank you.

23 Anything else?

24

Okay, I think we'll go ahead and break for

L.A. REPORTING
(312) 419-9292

108

1 lunch then. We will start up again in one hour. Would
2 1:30 give everybody enough time, little bit less than
3 one hour?

4 See you at 1:30.

5 (Whereupon, a lunch break was
6 taken.)

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1 regulations regarding Polychlorinated Biphenyls. Any
2 questions regarding that subject matter would be
3 entertained at this time.

4 Mr. Rieser.

5 MR. RIESER: Mr. Eastep, you've included the
6 standards for looking at PCBs in Part 300 that has to
7 do with preliminary exclusion of pathways.

8 MR. EASTEP: Yes.

9 MR. RIESER: Does this mean that anyone seeking to
10 exclude pathways under Part 300 has to sample for PCBs
11 or only if there's some facts related to the site which
12 indicate that that sampling could go forward?

13 MR. EASTEP: It's the latter. That's the way it
14 is now. That hasn't changed.

15 MR. RIESER: So as long as there's no indication
16 that there's any PCB releases, people do not have to
17 sample for PCBs to exclude pathways under Part 300?

18 MR. EASTEP: Yeah, that has not changed.

19 MR. RIESER: Thank you.

20 MS. KEZELIS: I have one quick question,
21 Mr. Eastep. Although you don't address MtBE, you do
22 address the Toxic Substance Control Act. Is MtBE
23 covered by that currently?

24 MR. EASTEP: I don't believe so.

1 MS. KEZELIS: I wasn't sure, but I needed that
2 clarification.

3 THE HEARING OFFICER: Any other questions on this
4 subject matter?

5 Okay, moving on then. The next Agency
6 witness that testified was Mr. Nickell regarding
7 proposed amendments to Sections 742.810, 742
8 Appendix C, Tables A, B, and C.

9 I believe the Board does have some questions,
10 so we'll start out with some questions from the Board.

11 MS. KEZELIS: Mr. Nickell, I've got a quick
12 question. Can you give us some examples for the record
13 of geological conditions where the downward vertical
14 dispersion would be restricted?

15 MR. NICKELL: Yes, I can. As a matter of fact, a
16 real world example is what brought this to our
17 attention.

18 It was an underground storage tank facility
19 where we had well data which was not showing to be
20 correct with the model data. It was one of those
21 situations where we had enough wells on site and we had
22 the data and we had the equations and we tried to match
23 the two together. It turned out the model was not
24 accurately predicting the concentration at the well

1 that we expected to see. The model was
2 underpredicting.

3 In looking at the cross-sections of the
4 geologic setting, the water-bearing unit was only
5 between four and five foot in thickness, therefore it
6 was our assumption that what had occurred was at the
7 source of the release. The contamination had already
8 penetrated the groundwater to that maximum depth to
9 that clay-confining layer.

10 Therefore the model was underpredicting the
11 concentration in the downgradient direction because the
12 model was accounting for continual dispersion in the
13 vertical direction that in the real life situation was
14 not actually occurring.

15 MS. KEZELIS: Clay would be one example.

16 MR. NICKELL: Clay would be the most prominent
17 example, yes.

18 MS. KEZELIS: Thank you.

19 MR. NICKELL: And of course the Agency would not
20 impose that unless we had cross-section data, well log
21 data that would support the fact that there was
22 actually a confining layer.

23 MS. KEZELIS: Thank you.

24 MS. LIU: Mr. Nickell, since the equations that

1 you mentioned weren't very accurate in predicting the
2 downgradient concentrations in the presence of a
3 vertical confining layer, is there another set of
4 equations that the Agency proposes that would be more
5 reliable, or is there a way to fix this current
6 equation to drop out that vertical dispersion
7 component?

8 MR. NICKELL: Well, what my proposal would be to
9 do, in that situation you can merely remove that
10 vertical component from the equation and still use the
11 same equation without that component in it. And right
12 now that is our only proposal.

13 However, we do have the Tier 3 opportunity
14 which allows people to come forth with other equations
15 that may more accurately predict flow in particular
16 geological situations. We are always open in Tier 3 to
17 review alternative models.

18 MS. LIU: Thank you.

19 THE HEARING OFFICER: Mr. Rieser.

20 MR. RIESER: Mr. Nickell, at the end of your
21 testimony you say that the Agency would like to reserve
22 the right to exclude particular sites from using the
23 vertical dispersion factor if the geological conditions
24 warrant.

1 Is there language that's proposed either in
2 the regulation itself, or is a footnote within the
3 appendices dealing with the formulas in which this
4 reserved right is identified and addressed and the
5 factors for when it would apply identified?

6 MR. NICKELL: Yes. The footnote of the equation
7 has been changed to state that the equation may not
8 accurately predict downgradient concentrations in the
9 presence of a confining layer. But we know that there
10 is no detail in the body of the rule which would
11 dictate under what specific geologic conditions we
12 would impose that restriction.

13 MR. RIESER: Is there some consideration to
14 expanding that footnote just to get a better sense of
15 if under certain circumstances the Agency would not
16 allow that formula to be used?

17 MR. NICKELL: We haven't put together any
18 language. I will admit to having attempted that.
19 However, because of the variations in geology and the
20 variation in the chemical properties of the
21 contaminants that may be of concern, that would have
22 been particularly a large undertaking for a footnote,
23 and therefore I didn't pursue it.

24 MR. RIESER: Thank you.

1 THE HEARING OFFICER: Any other questions for this
2 witness?

3 Are we ready move on? All right, thank you,
4 Mr. Nickell.

5 Ms. Sullinger, looks like she's up next. She
6 had talked to us about proposed changes to Appendix A,
7 Table G; Appendix B, Tables A and B. Any questions in
8 this regard?

9 MS. LIU: Ms. Sullinger, in Appendix A, Table G,
10 you mentioned that revised background levels for
11 arsenic were based on new data that you had after a
12 1994 Agency survey. For those 177 new data points that
13 were collected and added to a database, has a new
14 report since been published?

15 MS. SULLINGER: No. We are compiling the data.
16 Our intention is to issue a new report, but we do not
17 have that prepared at this time.

18 MS. LIU: Thank you.

19 THE HEARING OFFICER: When do you anticipate
20 having that completed?

21 MS. SULLINGER: I don't have a date for that at
22 this time.

23 MS. LIU: Just out of curiosity, were studies done
24 to determine if background levels were different for

1 any other chemicals? What triggered you to look at
2 arsenic?

3 MS. SULLINGER: The data that was collected was
4 for all the inorganics that we originally had published
5 in our 1994 study. This particular presentation we did
6 focused on the data we collected for arsenic. But we
7 do have data for the other inorganics also.

8 DR. HORNSHAW: I might add in that the data review
9 and recalculation of the whole entire database was
10 intended to be work for a summer intern that hasn't
11 showed up in two years now.

12 MS. KEZELIS: Probably isn't going to show up this
13 summer either.

14 MS. SULLINGER: I think I'm the intern.

15 THE HEARING OFFICER: Any other questions?

16 Moving right along then. Mr. Clay spoke to
17 us about the proposed addition of regulations for MtBE.
18 I assume we probably got some questions in this regard,
19 so we'll begin with any questions that the Board might
20 have.

21 MS. KEZELIS: I almost don't know where to begin.
22 As suggested by the testimony of one of the Agency
23 witnesses, yes, indeed, I think we are all very
24 concerned and interested in MtBE.

1 One of the statements I recall was that the
2 USEPA is studying MtBE currently as well; is that
3 correct?

4 MR. CLAY: Yes.

5 MS. KEZELIS: Do you have any knowledge as to when
6 the USEPA anticipates completing its study or what the
7 nature of the study actually is?

8 MR. CLAY: Well, they're reviewing the
9 cancer-causing potential, the research on that. As
10 attached to my testimony, USEPA Administrator Carol
11 Browner had convened a blue-ribbon panel of experts to
12 look at MtBE. And they concluded a number of
13 recommendations, which included reducing the amount of
14 MtBE being used, including that Congress look at the
15 requirement for MtBE and the Clean Air Act as well as
16 additional sampling done not only at remediation sites
17 but at community water supply wells to see how big a
18 problem it is.

19 I mean, it's an issue that nearly every state
20 is dealing with. Most states are in the process of
21 developing MtBE action levels. They term it different,
22 but action levels, remediation levels.

23 So it's a big issue. It's been a big issue
24 for a number of years. At our annual conference with

1 USEPA and all the other states, it's always on the
2 agenda.

3 It really came to the forefront in California
4 with the Santa Monica situation where the Santa Monica
5 water supplies were contaminated with MtBE. It was a
6 huge well field that served thousands of people.

7 So it is a national issue. And we just
8 didn't feel like we could wait until all of the
9 studying was done by USEPA. And some of these studies
10 will take ten years potentially. And USEPA has
11 recommended that we begin monitoring and sampling of
12 MtBE immediately.

13 MS. KEZELIS: MtBE's degradation appears to be
14 much slower than that of benzene. For a number of
15 years we focused on benzene and its quantities as we've
16 been measuring. How different is their degradation
17 process from a time perspective? If that's not
18 appropriate to ask, if we could jump forward.

19 MR. CLAY: I was going to say, Tom, you can
20 probably --

21 DR. HORNSHAW: The standard reference that we've
22 used to put the first order degradation constant in the
23 TACO table that has all the physical/chemical constants
24 lists a value for MtBE that was kind of suspect or

L.A. REPORTING
(312) 419-9292

119

1 appears kind of suspect to us based on real life

2 experience, both Illinois and across the nation, on how
3 much MtBE degrades as it moves with groundwater through
4 soil.

5 Most of the sites that have looked at both
6 benzene and MtBE, it appears that MtBE moves faster and
7 farther than benzene partly because it's not degrading
8 as it's moving along. Of course a large part of that
9 is because it's much more water soluble than benzene so
10 it can move with groundwater faster. But it doesn't
11 appear to be breaking down as predicted.

12 So that's part of the reason that we're
13 asking the Board to carefully considered what first
14 order of degradation constant should be placed into the
15 table of this chemical constant for MtBE. It should be
16 somewhat closer to that of benzene and possibly even
17 zero rather than what value comes out of the standard
18 reference that we've been using.

19 MS. KEZELIS: How does one clean up MtBE?

20 MR. O'BRIEN: It's pretty difficult. Because of
21 the physical properties, it's not easily removed by air
22 stripping, which is one technique that's used for a lot
23 of organic volatiles. And neither does it absorb
24 particularly to organic carbon, which powered carbon

L.A. REPORTING
(312) 419-9292

120

1 treatment is another of the time tested treatment

2 techniques that are used for removal of organic
3 contaminants in groundwaters.

4 At this time there's a lot of effort on
5 trying to find particular microorganisms that will
6 degrade it. There are some that will degrade it, but
7 they're not naturally prevalent everywhere.

8 You know, there's a lot of work essentially
9 on trying to isolate those bugs, grow them in counties,
10 inoculate areas that are contaminated, and try and
11 manage the groundwater in a way that a reduction will
12 occur.

13 At this point, though, a lot of MtBE sites
14 are essentially just being diluted out. And wells that
15 are in their way are having to be taken out of service.

16 MS. KEZELIS: Such as happened in Kankakee?

17 MR. O'BRIEN: That's correct.

18 MS. LIU: Mr. Hornshaw, are there other technical
19 references that you could recommend for a different
20 degradation constant that the Board could consider
21 besides the one that --

22 DR. HORNSHAW: None that I'm aware of. We have
23 typically relied on just the one. It's got most all
24 the chemicals that we need. I am just not aware of

L.A. REPORTING
(312) 419-9292

121

1 another one that addresses this specific issue.

2 MS. LIU: Mr. Clay, you proposed several different

3 levels for remediation for MtBE, whether it's in soil
4 or groundwater, ingestion or inhalation. What
5 references did you use specifically to arrive at those
6 numbers?

7 MR. CLAY: I guess I'd like to defer that to
8 Mr. Hornshaw, 70 parts per billion, and then the 320 in
9 soil correlates to the 70. It's how much is actually
10 going to leach out of the soil that would be equivalent
11 to the 70 parts per billion. But as far as the 70
12 being the appropriate number, Tom, do you want to speak
13 to that?

14 DR. HORNSHAW: You weren't talking about all of
15 the different numbers, the one that's based on
16 migration to groundwater, or were you talking about all
17 of the soil objectives?

18 MS. LIU: I would imagine all of them.

19 DR. HORNSHAW: For the inhalation pathway, USEPA
20 has a reference concentration in their IRIS database,
21 which is the preferred database for all of the
22 chemicals that are in the Tier 1 Tables. So that was
23 fairly easy. We just took that number out of the IRIS
24 database and plugged it into the inhalation equations,

L.A. REPORTING
(312) 419-9292

122

1 and that generated the soil concentrations that are for
2 the inhalation pathways.

3 For the ingestion pathway and for the
4 groundwater pathway and the migration to groundwater
5 pathway, no such value is available from the USEPA
6 sources. We relied on the information that was
7 developed for the original proposal for health advisory
8 that the Agency issued in 1993 I think. I'm not sure
9 of the exact date.

10 We published it for comment, received
11 comments, and were never able to adequately resolve the
12 issues -- all of the issues that were brought up as a
13 result of the public comments that were sent to us. So
14 we never finalized that health advisory.

15 So we came back to that nonfinalized health
16 advisory to develop the ingestion pathway toxicity
17 reference value, and we cited that a value of -- I'd
18 have to look back, but I think it's .1 milligram per
19 kilogram per day as a safe ingestion exposure for a
20 lifetime of exposure essentially.

21 We did not address the issue of cancer
22 specifically in that original health advisory document.
23 We determined that the information available in 1993
24 was not sufficient for USEPA and therefore not us to

L.A. REPORTING
(312) 419-9292

123

1 make a determination whether MtBE is a cancer risk for
2 humans.

3 Information that has come out subsequent, and

4 that's what USEPA is reviewing now, suggests that maybe
5 cancer is relevant in point for humans based on animal
6 data, but that decision has not been made at the
7 federal level, and we're not prepared to make that
8 decision as an agency right now.

9 So we had to go back to a noncancer end point
10 to make a proposal to the Board for an effective
11 concern which turns out to be the same value that we
12 had originally put in the 1993 proposal for health
13 advisory.

14 No new noncancer information has become
15 available for the ingestion route anyway, so we went
16 right back to the original proposal. And the value
17 that came out of that is what we used to develop the
18 ingestion values for soil and groundwater and the
19 migration to groundwater pathway.

20 MS. KEZELIS: Are you aware of any states or
21 regulatory entities that are using a value less than
22 that?

23 DR. HORNSHAW: Yes. California I believe has
24 already adopted a groundwater standard of .13 or .14 --

L.A. REPORTING
(312) 419-9292

124

1 I'm sorry, .013 or .014 milligrams per liter as their
2 groundwater and drinking water standard. I know that's
3 based on cancer as an end point.

4 The State of New York either has finalized --
5 I know they have proposed and I think they may have
6 finalized a value of .01 milligram per liter again
7 based on cancer as an end point.

8 There are a number of states that have values
9 all over the board based on noncancer end points. I
10 suspect almost all of them use the same end points that
11 we have used as the basis for the noncancer values that
12 we proposed.

13 MS. KEZELIS: Thank you.

14 DR. HORNSHAW: Those end points are changes in
15 blood parameters and a persistent diarrhea in the
16 laboratory animals.

17 MR. CLAY: I might add that there are many more
18 states that are establishing, it may not be remediation
19 objectives, but action levels. And a number of those
20 are based more on the taste and odor threshold, which
21 is between 20 and 40 parts per billion. So there are a
22 number of states that are in the 20 to 40 range as far
23 as action levels for MtBE.

24 THE HEARING OFFICER: Any other questions?

L.A. REPORTING
(312) 419-9292

125

1 MR. MELAS: Mr. Clay, you mentioned this
2 blue-ribbon panel with the administrator. I was just
3 looking at the press release that you included in here.
4 Is the panel still functioning, or did they complete

5 their basic work?

6 MR. CLAY: It's my understanding that they
7 completed what they had been asked to do by
8 Administrative Browner. As far as I know, they are not
9 continuing to meet.

10 MR. MELAS: Are there any other active studies
11 going on at USEPA now? You did mention they were
12 exploring the carcinogenic effects.

13 MR. CLAY: Right.

14 MR. MELAS: Any further work that is on the
15 horizon?

16 MR. CLAY: Well, there is a symposium that is --
17 I'm not sure it's through ASTM or it's through USEPA
18 that is going to be going on in November regarding the
19 treatment of MtBE. And we're hoping to send someone to
20 that.

21 There's also a number of work groups that are
22 looking at MtBE, USEPA. It's primarily USEPA, but
23 there may be some other state agencies represented on
24 those work groups. And I can look for the specific

L.A. REPORTING
(312) 419-9292

126

1 work groups and provide that at a later date if you'd
2 like.

3 MR. KING: Just to add, the petroleum industry as
4 well, American Petroleum Institute has been doing a lot

5 of work in trying to develop technologies for how do
6 you treat MtBE. There's a lot of study work going on
7 relative to that on a federal level as well.

8 THE HEARING OFFICER: Mr. Cobb?

9 MR. COBB: There have been a number of different
10 studies to look at the different cost-effectiveness.
11 And we've got one site that we're working with right
12 now where a community water supply is affected and the
13 engineers for the supply are evaluating different
14 options for remediation.

15 Once it's in the community well, of course
16 each of those comes with a specific cost. Higher
17 air-to-water ratios for air stripping, et cetera.

18 Also in terms of additional things that USEPA
19 is doing, they had been funding the United States
20 Geological Survey to do some comprehensive testing
21 across the United States. And I still think that
22 they're out doing that. I also believe they have a
23 proposal before TSCA potentially to work and regulate
24 MtBE. So those are some other factors that I'm aware

L.A. REPORTING
(312) 419-9292

127

1 of.

2 MS. KEZELIS: Are there just the three wells so
3 far?

4 MR. CLAY: There are four.

5 MS. KEZELIS: And is that a fifth?

6 MR. COBB: Specifically the communities where
7 we've had to shut down wells are the Oakdale Acres
8 Subdivision in Kankakee where the well field was shut
9 down and hooked up to the water supply.

10 The next would be the East Alton supply down
11 in Madison County where one of the wells, one of the
12 community wells actually was being used as a hydraulic
13 containment well to protect the rest of the well field.
14 So it's been removed from the system and actually
15 discharging.

16 Secondly, Roanoke, Illinois in Woodford
17 County, there were a number of wells that were kind of
18 alternating back and forth.

19 And then the fourth community would be Island
20 Lake, which is kind of on the border of McHenry and
21 Lake County where one well was shut down and they
22 drilled some new wells and they're getting some
23 lower-level detections in those wells.

24 MR. CLAY: And the treatment facility you were

L.A. REPORTING
(312) 419-9292

128

1 referring to is the East Alton one?

2 MR. COBB: That's correct. East Alton is what I
3 was referring to. The plume that we know of at least
4 adjacent to the well was probably in exceedance of a
5 thousand parts per billion.

6 I think maybe the highest concentrations that
7 we saw in the community well were on the order of 500
8 parts per billion. And the discharge after evaluating
9 with treatment is down into the hundred or so parts per
10 billion range. And the finished water concentrations
11 have been on a continual downward trend since the
12 hydraulic containment well was being put in.

13 The engineer for East Alton did look through
14 a number of different cost and benefit scenarios in
15 terms of -- that would be Option 1 that I just
16 described. Option 2 would be with granular activated
17 carbon and what costs that would have, Option 2 being
18 what they have got plus granulated activated carbon and
19 air stripping, versus other options would include
20 hooking up to other water supplies and what that would
21 cost versus also the option of looking for an entire
22 new well field. So we do have that information.

23 THE HEARING OFFICER: Were you able to trace the
24 source of the MtBE?

L.A. REPORTING
(312) 419-9292

129

1 MR. CLAY: We believe that the source, based on
2 all the information we have at this time, is from two
3 underground storage tanks -- underground storage tanks
4 at two separate facilities. They're current or former
5 gas stations.

6 THE HEARING OFFICER: And that would be with each

7 of the four locations where wells have been shut down?

8 MR. O'BRIEN: No.

9 MR. KING: No.

10 MR. CLAY: No, that is for the East Alton
11 facility.

12 MR. O'BRIEN: The Oakdale Acres was a result of
13 interstate transmission pipeline carrying a refined
14 product. And they reported 6,000 gallons of gasoline
15 spilled.

16 MS. KEZELIS: The others?

17 MR. CLAY: The other two are unknown at this time.
18 We haven't pinpointed the exact path or location of
19 what has caused the MtBE contamination.

20 MR. KING: Let me give you a little background as
21 to why this is a real problem administratively for us.
22 Back in the spring of '98 Doug Clay and I met with
23 representatives of the four major oil companies. I'll
24 give the names that they had then. There was Amoco,

L.A. REPORTING
(312) 419-9292

130

1 Shell, Mobil, and Marathon.

2 And we asked them to do some monitoring for
3 MtBE. They agreed because they thought it made some
4 sense to do so. And in essence each company picked the
5 next 25 sites that were coming up for groundwater
6 monitoring to also monitor for MtBE.

7 Now, we were hoping in '98 that when those
8 results came in, that we would see -- the best hope was
9 that, well, Illinois has been mostly ethanol related as
10 far as the additive, that maybe we wouldn't see too
11 much of an MtBE problem or at least there'd be some
12 kind of a correlation between what we were seeing in
13 the way of other contaminants or location around the
14 site, and there was none of that.

15 We saw no correlation between areas of the
16 state and the MtBE levels that we saw. We saw no
17 correlation between like a key compound like benzene.

18 So it really is an issue that there's been --
19 because of the way MtBE is added in the fuel supply,
20 that there's been a lot of cross-contamination. MtBE
21 has ended up in a lot of areas where it would not have
22 been expected to be present.

23 So it would be nice to be able to look at
24 this as being a specific problem area in one part of

L.A. REPORTING
(312) 419-9292

131

1 the state, but it's not. We found it all over the
2 place. So, Doug, I don't know if you want to add
3 anything.

4 MR. CLAY: We would have expected it to be in the
5 metropolitan areas because the use of that, it is being
6 used to meet the clean air requirements.

7 The other thing to point out, it's our

8 understanding that MtBE can be added in pipelines and
9 pumped where ethanol has to be added just prior to
10 distribution because it separates in a pipeline. So
11 it's much easier to distribute gasoline with MtBE as
12 opposed to gasoline with ethanol.

13 And it's very easy to cross-contaminate
14 lines. And even if maybe one company didn't use much
15 MtBE, again, it's our understanding that they commonly
16 use the same lines or will buy and sell gas to each
17 other. So it's easy to contaminate the lines even if
18 one company never used MtBE themselves.

19 DR. HORNSHAW: And also MtBE was added to premium
20 gasolines early when it was first introduced as an
21 octane booster so that people would have maybe not even
22 known they had MtBE, but by handling premium fuels
23 there was MtBE there as an octane booster rather than
24 as something there to comply with the Clean Air Act.

L.A. REPORTING
(312) 419-9292

132

1 MS. KEZELIS: Roughly when did it start coming
2 into --

3 DR. HORNSHAW: I believe the earliest use was
4 1979.

5 MR. CLAY: Yeah, it was in the late '70s. Again,
6 as an octane enhancer at that point and then --

7 MS. KEZELIS: For Clean Air Act purposes.

8 MR. CLAY: The Clean Air Act was in the late '80s.

9 MR. KING: 1990s that came in. It's in the '90s
10 where you had a much higher level of MtBE placed into
11 fuel.

12 As you might expect, I just mentioned the
13 discussion we had in '98 with the major oil companies.
14 We've continued to have discussions with them as we've
15 attended meetings. They are also participating in the
16 meetings that IEPA has held and also the national
17 meetings and that.

18 So I think there's been a good level of
19 cooperation and a good level of working together to try
20 to develop a proposal that from our standpoint makes
21 sense. I don't know what -- the oil industry may end
22 up responding to this proposal in a negative way in
23 these hearings, but I think we've certainly been
24 working together in a cooperative way to develop a

L.A. REPORTING
(312) 419-9292

133

1 proposal.

2 MS. KEZELIS: Because of its ease of dispersion
3 and its cross-contamination, that must present even
4 greater problems for the LUST program purposes. You
5 can't guarantee with any amount of certainty that an
6 underground storage tank that hasn't been used since
7 the mid 1980s might not have still had MtBE
8 contamination.

9 MR. KING: That's exactly right.

10 MR. CLAY: Yes. And it does introduce a whole new
11 set of challenges being as mobile as it is. You know,
12 the intent of the upgrade requirements that were to be
13 in place by December of 1998 as far as leak detection
14 and secondary contamination, that was meant to identify
15 these releases much quicker not because of MtBE, but
16 obviously the quicker you get it and respond to a
17 release and contain the release and remediate it, the
18 less potential you have for migration.

19 Well, MtBE, as Tom said, is migrating faster
20 than benzene, which in the past had been the most
21 critical or what drove most cleanups. With MtBE, it
22 may be the one that drives the most cleanups because of
23 its mobility in the future.

24 MS. KEZELIS: Slightly different perspective on

L.A. REPORTING
(312) 419-9292

134

1 MtBE, but isn't one of the parameters tested under the
2 Safe Drinking Water Act changes we recently adopted
3 for purposes of public water supplies, annually the
4 water --

5 MR. COBB: I'll try to answer that. Currently it
6 does not have a drinking water standard. However,
7 USEPA in their recent federal register proposal, it's
8 one of the contaminants of concern where supplies are

9 starting or required to start testing and collecting
10 data.

11 Illinois EPA, or in Illinois I should say, we
12 have something called the laboratory fee system where
13 many communities pay into that. And then by doing that
14 they get to use the services of our laboratory.

15 MS. KEZELIS: Standardized items being tested.

16 MR. COBB: Correct. In 1994 after the Oakdale
17 Acres Subdivision incident where we had the entire well
18 field pretty much wiped out by MtBE, since the
19 methodology, it's the 500 series methodology in the
20 drinking water program, will detect MtBE, we
21 recommended that our laboratories start quantifying for
22 MtBE. So as a result of that, I think it's on order of
23 1100 some supplies that we have screened.

24 Now, taken this is finished water where you

L.A. REPORTING
(312) 419-9292

135

1 have a well field where multiple wells are coming
2 together and you may get maybe diluting what possibly
3 might be out in the source water itself, but I will
4 tell you that that is what we've done in Illinois in
5 advance of not really wanting to wait for USEPA on that
6 matter.

7 MS. KEZELIS: So at least you have some
8 monitoring, although in a diluted status, of what has
9 happened across the state.

10 MR. COBB: The only other thing I'll add to that
11 is that we do have an ambient monitoring program of
12 community water supply wells. And that's a
13 statistically-designed network. And through that
14 program is actually how we found the detections in the
15 East Alton supply.

16 In addition, where we found these problems
17 we've tended to augment that monitoring. For example,
18 our staff is out there on a bimonthly basis collecting
19 samples from these wells where we have some significant
20 concerns like East Alton and a couple of the other
21 spots.

22 So in addition we're certainly making certain
23 proposals to our administration for consideration,
24 further expanding some of those monitoring efforts. So

L.A. REPORTING
(312) 419-9292

136

1 I'll say it's kind of two or threefold in terms of how
2 we're looking at it and also in conjunction with what
3 the industry has done to monitor.

4 MS. McFAWN: You used that figure 1100. That was
5 to represent --

6 MR. COBB: Facilities, not wells. There's around
7 12 to 1100 facilities, community water supply
8 facilities, and they utilize around 3000 wells just to
9 get those statistics straight.

10 MS. McFAWN: And that's the number that's part of
11 that system, the fee system?

12 MR. COBB: Yes. Yeah, there are some that still
13 use private laboratories that don't participate in the
14 lab fee system, they go out to a private lab and get
15 their analysis run. Now, for those folks, yeah, I
16 don't know whether they're requesting their laboratory
17 to test for MtBE.

18 MS. McFAWN: So is this where you're finding the
19 data that Mr. King referred to, the number of areas
20 that had been impacted?

21 MR. COBB: Mr. King was referring to monitoring I
22 believe at LUST sites.

23 MR. KING: At LUST sites. Those were at LUST
24 sites.

L.A. REPORTING
(312) 419-9292

137

1 MR. COBB: I'm referring to portable water
2 supplies, mainly community --

3 MS. McFAWN: Have you found much --

4 MR. COBB: 26 community water supplies we found
5 detectable levels, and then earlier we included the
6 testimony of the four supplies where we've gone beyond
7 detectable levels where it's certainly above the taste
8 and odor threshold in wells. We get concerned when the
9 finished water starts rising. I think we've tried to
10 work together to appropriately respond to those

11 instances.

12 THE HEARING OFFICER: And those 26 communities are
13 spread throughout the state?

14 MR. COBB: That's correct.

15 THE HEARING OFFICER: So not focusing on the
16 noncontainment areas.

17 MR. COBB: As Mr. King testified, it's across the
18 state. There's no one particular region over another.

19 MS. McFAWN: Mr. Clay, in your testimony you
20 stated that MtBE has not been required to be sampled
21 for gasoline releases in Illinois.

22 MR. CLAY: Correct.

23 MS. McFAWN: So you're finding it --

24 MR. KING: That was a voluntary effort. The oil

L.A. REPORTING
(312) 419-9292

138

1 companies that we requested to do that did that
2 voluntarily.

3 MS. McFAWN: Thank you.

4 MR. CLAY: There had been a lot of interest
5 nationally, a lot of states were beginning to sample,
6 and we went to these four companies and asked if they
7 would be willing to voluntarily do this, and they did.

8 And so we sampled a hundred sites randomly
9 just to get a feel, as Gary said, is this a big problem
10 in Illinois or is it a much lesser problem than in

11 other states because of the use of ethanol.

12 MS. LIU: When a new chemical like MtBE is added
13 to your list of remediation objectives, what are the
14 retroactive implications to sites that have already
15 received no further remediation letters?

16 MR. CLAY: Let me take a step back. We're adding
17 it here -- proposing it here in TACO. We will also be
18 proposing it as an indicator contaminant in our
19 amendments to 732 rules, the LUST rules. So it will be
20 required to be sampled for new releases.

21 We don't feel it has any bearing on NFR
22 letters that have been issued. We don't plan on going
23 back and looking at those sites.

24 Any time a new chemical is introduced like

L.A. REPORTING
(312) 419-9292

139

1 that, I don't know that we've ever gone back or even
2 when the remediation levels have changed. I mean, if
3 we have more information, we normally start from that
4 point on. We don't go back in time and reopen all
5 these sites.

6 As an example, there are over 9,000 leaky
7 underground storage tanks that received an NFR letter
8 equivalent. We would not propose to reopen those or go
9 back and look at those.

10 Now, one thing we are going to be proposing
11 in 732 is that if a site has received an NFR letter and

12 there is a problem with MtBE above 70 parts per
13 billion, if they choose to come back in the program, we
14 will allow that, and if they're eligible for the fund,
15 the underground storage tank fund as determined by the
16 Office State Fire Marshal, we would also pay for the
17 MtBE remediation. That's the only time that I know of
18 where someone has an NFR letter and we're allowing them
19 back into the fund.

20 THE HEARING OFFICER: But it would be their
21 decision.

22 MR. CLAY: It would be their decision at that
23 point. Conceivably if it were causing a impact to a
24 community water supply or something else, there are

L.A. REPORTING
(312) 419-9292

140

1 other provisions of the act that we could look at to
2 address that contamination. But it really is up to
3 them initially.

4 MS. LIU: So in the case that you did come across
5 a portable water supply that was found to be
6 contaminated and attributed to a site that already had
7 been closed, you could go back to that site?

8 MR. CLAY: I think there are --

9 MR. KING: Yes. The answer is we would find a way
10 to --

11 MR. CLAY: Probably not through the LUST program,

12 but there are other provisions of the act such as 12(a)
13 and 12(d).

14 THE HEARING OFFICER: Any other questions?

15 Okay. Thank you.

16 Ms. Hurley was the next Agency witness, and
17 she discussed proposed amendments to Appendix A,
18 Table H; Appendix B, Tables A, B, E, and F. Any
19 questions for Ms. Hurley?

20 Mr. Rieser.

21 MR. RIESER: And this is a follow-up on Ms. Liu's
22 question. What you're proposing are changes to various
23 detection limits, and because of the change of
24 detection limits, that's going to result in a change in

L.A. REPORTING
(312) 419-9292

141

1 certain cleanup standards, correct, certain remediation
2 objectives?

3 THE HEARING OFFICER: Why don't you repeat the
4 question. We couldn't hear.

5 MR. RIESER: I started with one thing and went to
6 another.

7 What you're proposing is changes to detection
8 limits, and as a result of these changes there will be
9 changes to certain remediation objectives, correct?

10 MS. HURLEY: There's a change to -- some of the
11 changes in Table H are for the Class 1 groundwater
12 remediation objectives, yes.

13 MR. RIESER: To what sites will these revised
14 remediation objectives apply after the effective date
15 of this regulation?

16 MR. KING: In terms of categories of sites or
17 programs?

18 MR. RIESER: Yeah. For example, for sites that
19 are currently in the site remediation program that have
20 contaminants of concern that would be implicated by
21 these changes, would they now have new remediation
22 objectives to shoot for, or would it only apply to
23 sites that have not yet entered the site remediation
24 program?

L.A. REPORTING
(312) 419-9292

142

1 MR. KING: I think we've covered that in our
2 Part 740 proposal. That's kind of an implementation
3 thing.

4 MR. RIESER: So it would depend on the
5 implementation regulations for the individual programs?

6 MR. KING: Right.

7 MR. RIESER: How would that apply -- I'm sorry,
8 for both 740, which applies to site remediation program
9 sites, and 732, which applies to underground storage
10 tank sites, there would be specific regulations that
11 would say when these changes in 742 would apply?

12 MR. KING: Yeah, that's what I recall. I don't

13 have those in front of me. I'm thinking specifically
14 like in the LUST rules there's a schedule how MtBE
15 becomes an indicator contaminant.

16 MR. RIESER: Hasn't it been the Agency's policy to
17 apply revised remediation objectives only to sites that
18 are not currently in the site remediation program for
19 example and not to apply to sites that are currently in
20 the program?

21 MR. KING: I guess I'm not understanding the
22 question.

23 MR. RIESER: I'm just asking you, somebody's got a
24 site remediation program which has contaminants of

L.A. REPORTING
(312) 419-9292

143

1 concern for which the detection limits are now
2 changing, do they have to redo all of their remediation
3 objectives reports and investigation planning to
4 account for these revised objectives?

5 MR. KING: I guess the bottom line, you don't have
6 to redo all your data. You can still use the old
7 information to the extent it continues to have
8 relevance, continues to have accuracy.

9 MR. RIESER: But for those sites for which the
10 contaminants of concern for which the remediation
11 objectives would be modified by this rulemaking, would
12 they now -- even if those sites are currently in the
13 remediation program, would they now have new

14 remediation objectives to shoot for?

15 MR. EASTEP: I think it would depend on where they
16 were at in the program. There have been some people
17 that have entered the program four years ago and for
18 whatever reason haven't proceeded in the program, they
19 have just entered it in effect. Maybe they haven't
20 even done any sampling. Those people would follow the
21 new rules.

22 I would think, though, if you had a site that
23 had developed remediation objectives and we had
24 approved the plan, that they wouldn't have to go back

L.A. REPORTING
(312) 419-9292

144

1 and do anything.

2 Or I guess conceivably somebody could have
3 even submitted their report, documenting their
4 completion report, they would not have to go back if it
5 were in that transitional period. So it would probably
6 depend on where they were at in the program.

7 If they had done an investigation
8 three-and-a-half years ago and not done anything since
9 and then they continued the investigation next year
10 after the rules were passed, then they would be subject
11 to the new rules too.

12 MR. RIESER: Would that answer change at all for
13 people in the RCRA program as opposed to the site

14 remediation program?

15 MR. EASTEP: I want to say the answer would
16 probably be the same, but I haven't been as close to
17 RCRA in the last several years. As a matter of rule it
18 would unless there's something that's specifically in
19 RCRA or in the Agency's RCRA rules in 724 or '5 that
20 would change that.

21 MS. KEZELIS: I for one think the observations and
22 questions Mr. Rieser has raised are very important, and
23 I'd like to have the Agency respond in greater detail
24 in writing if that would be of benefit.

L.A. REPORTING
(312) 419-9292

145

1 Because I think for somebody, one of the
2 regulated entities that's in the process, I think it's
3 very important for those folks to know at what point
4 these rules will apply to them and at what point they
5 are -- they have assurance that they can continue with
6 what they started out with when they entered the
7 program. So --

8 MS. GEVING: Would it be okay to do that as part
9 of the final comment period?

10 MS. KEZELIS: My only concern is the shortness of
11 time that we have and the opportunity the Board would
12 need to digest what you all suggest. What's the final
13 comment period?

14 THE HEARING OFFICER: The deadline for written

15 public comments is currently set for October 23rd. So
16 I would say if you're not able to get something to us
17 before the next scheduled hearings in Springfield,
18 September 11th and 12th, something before final hearing
19 date would be very helpful. And that would be at least
20 September 21st or 22nd so we can have something in
21 writing for people to look at and question if there are
22 questions regarding the response.

23 DR. HORNSHAW: A couple of other points. Partly
24 in response to the question, it also depends on which

L.A. REPORTING
(312) 419-9292

146

1 tier the applicant is using. If they're using Tier 2
2 and 3, typically the Agency expects the applicant to be
3 using the most recent information, whether that's
4 toxicity information, physical/chemical constant
5 information, or detection limit information.

6 So if they're in Tiers 2 and 3, then I think
7 we would expect that they would be using the most
8 recent information for their submissions. Tier 1, that
9 would go back to what Larry was talking about.

10 And the other thing I might add is that
11 everything we're discussing about detection limits will
12 probably pertain to all the changes in Tier 1 that I've
13 testified to that came about because of changes in
14 toxicity information from USEPA. I mean, the same

15 principle applies.

16 MS. KEZELIS: Thank you for that clarification.

17 THE HEARING OFFICER: Any follow-up, Mr. Rieser?

18 MR. RIESER: No, that was fine. Thank you.

19 THE HEARING OFFICER: Anyone else?

20 MS. LIU: Ms. Hurley, do those practical
21 quantitation limits that you mentioned that needed to
22 be updated, do those reflect an improvement in
23 laboratory technology or analyzing equipment? How do
24 those come about?

L.A. REPORTING
(312) 419-9292

147

1 MR. O'BRIEN: There was an update to the SW-846
2 methods that included new methods and revision of
3 methods and inter-laboratory studies that USEPA
4 conducts on those methods.

5 The SW-846 methods are kind of continually
6 being revised, and they're distributed and published in
7 the Federal Register. Comments are received before
8 they're finally updated. And we have been using these
9 final updates that have been gone through the public
10 comment period process. The latest update, Update 3,
11 became available, and we felt it was important to have
12 those changes reflected in the TACO rule.

13 MS. LIU: Laboratories have to purchase new, more
14 advanced equipment, or are most of them in your feeling
15 already well equipped?

16 MR. O'BRIEN: Most of the laboratories operate on
17 the basis of the emerging technology, and it takes
18 quite a while to get the SW-846 methods updated. So by
19 the time the update's final, a lot of laboratories have
20 that capability.

21 MS. LIU: Will these new PQLs be retroactive,
22 meaning a site that was already previously
23 characterized, will they have to go back and resample
24 to these new numbers?

L.A. REPORTING
(312) 419-9292

148

1 MS. HURLEY: I think that's what Mr. Rieser and
2 Mr. Eastep and Mr. King were discussing.

3 MS. LIU: Thank you.

4 THE HEARING OFFICER: Anything else on the
5 substance of Ms. Hurley's testimony?

6 We have Mr. King and Mr. Hornshaw left.
7 Mr. King did not supplement his earlier presentation
8 with anything specifically regarding Subdocket B;
9 however, for those of you who have had the benefit of
10 his prefiled testimony before and have any questions
11 for him, now would be the time.

12 Mr. Rieser.

13 MR. RIESER: I think this was in Mr. King's
14 testimony. It had to do with the changes both to
15 Part 300 having to do with the way the engineered

16 barrier is described and then changes to Section 1105
17 having to do with the way you describe the engineer
18 barrier and the amount of material above -- area of
19 contaminants of concern. Was that in your testimony,
20 Gary?

21 MR. KING: Well, let me explain what we did. We
22 had sections in the 300 series kind of overlapping with
23 sections in the 1100 series. So we thought we'd
24 organize things by putting everything in the 1100

L.A. REPORTING
(312) 419-9292

149

1 series dealing with engineer barriers and in
2 cross-reference to that from the 300 series.

3 MR. RIESER: One of the changes that seems to be
4 made, and this was a subject of discussion between the
5 Agency and SRAC, was that instead of contaminants of
6 concern being pathways to contaminants of concern
7 because they're three feet below the ground or ten feet
8 below the ground for the ingestion and inhalation
9 pathways, that now they have to be covered by fill or
10 other geologic materials that meets the Tier 1
11 standards. Is that a correct summary?

12 MR. KING: Well, I'm not sure that that's a
13 change. I mean, we defined the 1100 series had used
14 the term clean soil, and so we changed that term to
15 make it broader.

16 MR. RIESER: My question is really more specific.

17 When you talk about the material that meets the Tier 1
18 residential standards, does that mean that a person
19 seeking to use this as a way of excluding pathways has
20 to sample for all of the Tier 1 constituents or simply
21 those that they expect to be contaminants of concern as
22 a result of their analysis of the site?

23 MS. GEVING: Mr. Rieser, would you state the exact
24 section you're looking at when you're stating your

L.A. REPORTING
(312) 419-9292

150

1 question?

2 MR. RIESER: I'm looking at specifically
3 742.1105(C)(II). And the same language is at 3(C)(II).

4 MR. KING: You'd be looking at the site. And if
5 it was just in situ material, you'd be looking at that
6 in situ material as you'd be looking at other issues
7 related to the site, is there a potential for that kind
8 of contaminant to be in that in situ material. If
9 there is, then you need to test for it.

10 If it's coming from off site as a material
11 that's being brought in as a barrier, well, you may
12 have to think about some different issues there because
13 now you'd have to think about where that material is
14 coming from, does it need to be analyzed for some
15 additional contaminants because of the location where
16 it's originating.

17 MR. RIESER: So is the answer that to make sure
18 that the material that you're relying on is being your
19 engineered barrier and assuming it's in situ material,
20 as long as you didn't have reason to suspect that a
21 contaminant was there, you wouldn't have to sample for
22 it just to document compliance with this section?

23 MR. EASTEP: The way we've handled these
24 situations, if they're using on-site material, we

L.A. REPORTING
(312) 419-9292

151

1 should have discovered that information during the
2 investigation.

3 If the investigation showed that the material
4 was not contaminated or met Tier 1, then that would be
5 suitable.

6 If the material were say off the remediation
7 site but on the property perhaps and they had never
8 investigated it before, then that stuff would have to
9 be sampled based on what we suspected about the
10 material.

11 MR. RIESER: So if you were using material that
12 wasn't in situ but that you were going to apply as a
13 barrier if you will, then you would have to sample that
14 material?

15 MR. EASTEP: Probably if we didn't know anything
16 else about it. We would have to have some assurance
17 that -- if it was brought in from a farm field in the

18 middle of Sangamon County, we might expect that that
19 would be clean. Whereas if it were brought from a
20 construction site in Chicago, we might want that
21 sampled for a number of things because we just know
22 that we find all sorts of things in urban areas.

23 MR. NICKELL: To add to what Mr. Eastep was saying
24 in clarification on the investigations, if, for

L.A. REPORTING
(312) 419-9292

152

1 instance, in your sampling plan with regard to depth
2 your first sample was collected at five foot and you
3 continue to sample down to 15, you discovered
4 contaminants and you decided that you want to use that
5 top five foot as your barrier; however, in your
6 previous plans you had never sampled the top five foot,
7 at that point we would probably require an analysis in
8 the top five foot because we have contaminants below it
9 but no sampling has been conducted in the surface. So
10 we would have to have some reliance that those surface
11 soils were protected.

12 MR. RIESER: But the sampling would be for
13 contaminants of concern that you'd expect to be at the
14 site and not simply the whole seat of Tier 1.

15 MR. NICKELL: Correct. They would be site
16 specific based on what the original plan was designed
17 to address.

18 MS. GEVING: You need to look at the definition of
19 contaminant of concern too because that's what's
20 intended.

21 MR. RIESER: Thank you. The other question I had
22 about Section 1105 has to do with 1105(C)(III), and
23 this is the description that says soil, sand, gravel,
24 or other geologic material that and then III says are

L.A. REPORTING
(312) 419-9292

153

1 minimum of ten feet in depth and not within ten feet of
2 any manmade pathway.

3 And I have a feeling that that not within ten
4 feet of any manmade pathway refers to contaminants of
5 concern and not the soil, sand, gravel, or other
6 geologic material. So I think that's an area where you
7 may have to do some editing. That's the question, what
8 that language is designed to address.

9 MS. GEVING: What would you propose the edit would
10 be?

11 MR. RIESER: I'm not sure what you're getting at
12 with that. I suspect that what you are looking for is
13 a determination as to whether the contaminants of
14 concern are within ten feet of the manmade pathway.

15 MR. NICKELL: Yes.

16 MR. RIESER: And that's the question you're
17 seeking to answer.

18 MR. CLAY: That's true. If you've got a

19 foundation, it's not just ten feet down, it's ten feet
20 laterally away from that foundation or from that sewer
21 conduit or whatever the pathway may be.

22 MR. RIESER: It may be that some wordsmithing has
23 to be done to clarify that for this regulation.

24 THE HEARING OFFICER: I think at this point we're

L.A. REPORTING
(312) 419-9292

154

1 nearly concluded, but I think we're going to take a
2 real short break right here and then come back, five to
3 ten minutes at the most, come back and finish up.
4 Should be pretty brief once we come back.

5 (Recess taken.)

6 THE HEARING OFFICER: We'll go back on the record.
7 And like I said before, I think we've just got a few
8 more wrap-up things to get through.

9 We had been roughly in Mr. King's testimony
10 when the latest series of questions erupted. Does
11 anybody have anything else that would generally fit
12 within the context of Mr. King's testimony?

13 If not, we'll move on to our final Agency
14 witness. Dr. Hornshaw spoke about modifications in
15 addition to the Tier 1 tables and then other general
16 clarifications and proposals throughout the rules
17 themselves.

18 So I guess at this time it might be just a

19 good time to say any general questions that people
20 might have that have not been covered so far, why don't
21 we go ahead and raise those and just move on from
22 there.

23 MS. KEZELIS: Dr. Hornshaw, any other guidance
24 you'd care to give us with respect to MtBE, any other

L.A. REPORTING
(312) 419-9292

155

1 observations you can make that would help us?

2 DR. HORNSHAW: The taste and odor threshold is
3 going to be a problem. As Doug said earlier, some of
4 the states are developing their action levels to
5 account for taste and odor.

6 MS. KEZELIS: So taste and odor becomes the
7 threshold?

8 DR. HORNSHAW: Yes. Triggers some kind of an
9 action.

10 MS. KEZELIS: And that's fairly low.

11 DR. HORNSHAW: The USEPA has done quite a bit of
12 work in that area, and I think American Petroleum
13 Institute has also. Looks like 20 to 40 parts per
14 billion is the range where at least some people can
15 start to detect a different taste or a different odor.

16 And of course the higher you get above that
17 20 to 40 part per billion range, the more people are
18 going to taste it and smell it and things like that and
19 be offended by it because it's not a particularly

20 pleasant odor.

21 Once you get into that range where a lot of
22 people are smelling it, you also are at the level where
23 our health effects based proposal is of 70 parts per
24 billion. And the question of cancer is still out

L.A. REPORTING
(312) 419-9292

156

1 there.

2 That's the primary thing that USEPA is still
3 trying to determine, whether the newer studies that
4 have been published or semi-published in the scientific
5 literature since we reviewed all the tox data for the
6 1993 health advisory, how relevant that new information
7 is to predicting risks for cancer is a decision that
8 USEPA still has to make.

9 I don't think we can wait for USEPA to make
10 that decision in order to do the cleanups at the
11 petroleum sites properly. That's why we came in with a
12 value of 70.

13 MS. KEZELIS: Thank you.

14 MS. LIU: Dr. Hornshaw, for the levels that the
15 Agency has proposed for MtBE remediation objectives,
16 you mentioned that they were derived from the IRIS
17 database as well as from your health advisory and
18 calculations subsequent to that. Could you provide the
19 Board with a copy of the reference that you used as

20 well as your calculations, please?

21 DR. HORNSHAW: That's in -- the information to
22 develop the water level is in the attachment to my
23 testimony, the original publication of the health
24 advisory in --

L.A. REPORTING
(312) 419-9292

157

1 MS. KEZELIS: Exhibit 2 to your prefiled
2 testimony.

3 DR. HORNSHAW: I believe that's it. That's how we
4 arrived at 70 parts per billion. That's one of the two
5 options in that health advisory that never got
6 finalized.

7 The information on the inhalation value is
8 available to you on line. You can go to USEPA's web
9 page and get on the IRIS database and it's all there
10 for you. I can print it out and submit it if you want,
11 but it's already available to you.

12 MS. LIU: Could you.

13 DR. HORNSHAW: Sure.

14 THE HEARING OFFICER: Could you also clarify for
15 the record what is IRIS.

16 DR. HORNSHAW: IRIS is an acronym. Stands for
17 Integrated Risk Information System. It's a
18 computer-based summary of over 600 now chemicals,
19 USEPA's evaluation of their health risks, and what are
20 appropriate daily exposures which should not result in

21 health risks to the general population for chemicals
22 that do not cause cancer and an evaluation of cancer
23 risk and one in a million cancer risk levels, for
24 instance, for chemicals that do cause cancer. And

L.A. REPORTING
(312) 419-9292

158

1 that's available on line and is updated I believe
2 monthly by USEPA.

3 THE HEARING OFFICER: It's a USEPA guidance
4 document as opposed to any kind of a regulatory
5 document?

6 DR. HORNSHAW: Yes.

7 MR. O'BRIEN: I'd just like to clarify what Tom
8 has been calling the 1993 health advisory was a
9 proposal published in the July 1994 Environmental
10 Register. It's attached as Exhibit 2 to his written
11 testimony.

12 THE HEARING OFFICER: Any more questions?

13 Could you identify yourself for the record,
14 please.

15 MR. RODECK: Shawn Rodeck with Handex.

16 Question I have, it was a little unclear from
17 before whether or not there was an actual degradation
18 constant selected for MtBE. Is that still in question
19 at this point?

20 DR. HORNSHAW: We have a value that we placed in

21 the Tier 1 table or the look-up table for
22 physical/chemical constants, but we've asked the Board
23 to carefully consider that value. Do you need to know
24 the exact number?

L.A. REPORTING
(312) 419-9292

159

1 MR. RODECK: No, not at this point.

2 THE HEARING OFFICER: Mr. Rieser.

3 MR. RIESER: Dr. Hornshaw, one of the -- and I
4 don't have the numbers in front of me, I'm sorry, but
5 you made some modifications to I think it was Part 700,
6 Section 700 and 800 with respect to changing organics
7 to volatiles and in some places volatiles to mercury.
8 And I was wondering if could you explain why the and
9 mercury was added to that.

10 DR. HORNSHAW: Sure. We are proposing to delete
11 the word volatiles because that has caused some
12 confusion. We were intending to replace that with
13 organic chemicals, and then later we realized that the
14 inhalation pathway objectives for mercury also used
15 those inhalation pathway equations. So by replacing
16 volatiles with organic contaminants, we were missing
17 mercury. We wouldn't have a basis for how the values
18 for mercury would be developed, so we had to go back
19 and add and mercury to the text.

20 MR. RIESER: So that doesn't change any of the
21 substantive requirements in TACO with respect to

22 mercury?

23 DR. HORNSHAW: No.

24 MR. RIESER: Thank you.

L.A. REPORTING
(312) 419-9292

160

1 THE HEARING OFFICER: Anything further?

2 If we have no other questions, I'll ask
3 again, does anyone wish to testify before the Board or
4 make a statement on the record at this time?

5 Okay, I want to remind you all then that our
6 next hearing is scheduled for September 11th continuing
7 on to September 12th, if necessary, in Springfield. I
8 believe that's a Monday and a Tuesday.

9 The hearing, without checking my notes, I
10 believe is set to begin at 10:00 a.m. And it will be
11 in the Board's Springfield office. It's located at
12 600 South 2nd Street in Springfield.

13 If you need help with directions or anything
14 like that, please feel free to give me a call. My
15 number and e-mail address are both on the hearing
16 officer orders issued in this case. I can also provide
17 them to you after the hearing today if you'd like.

18 The transcript compiled by the court reporter
19 will be available following this hearing, and it will
20 be available to you on our web site. The Board's web
21 site, for those of you that do not know, is located at

22 www.ipcb.state.il.us.

23 We have not requested an expedited transcript
24 for this proceeding. I would expect the transcript

L.A. REPORTING
(312) 419-9292

161

1 would be available on line within the next 10 to 14
2 days. You can always request a hard copy of the
3 transcript from our clerk's office at 75 cents a page.

4 As we alluded to earlier, the Board is
5 accepting written public comments in this matter as
6 well as testimony presented orally on the record.
7 Written public comments can be filed at any time with
8 the Board's clerk's office.

9 If you are on the service list, I would
10 remind you to also submit copies of your public
11 comments to others on the service list. Those written
12 public comments can be filed any time up to
13 October 23rd. If that date changes, it will be noted
14 in a hearing officer order. But that is the current
15 deadline.

16 Do any of the board members wish to make any
17 concluding remarks?

18 MS. KEZELIS: Only to thank all of the Agency
19 personnel who are here today. You clearly did put a
20 lot of work into this in monitoring TACO and working
21 with it and tracking the kinds of changes that you
22 would like to see for purposes of making sure the

23 program works as well as it can for Illinois. So I do
24 want to thank all of you. I think you've all done a

L.A. REPORTING
(312) 419-9292

162

1 really good job.

2 THE HEARING OFFICER: One other thing I would note
3 then. If the Board has any written questions as far
4 follow-up for the witnesses that were here today, we
5 will provide those written questions to the witnesses
6 and to those persons who are on the notice and service
7 list.

8 MR. MELAS: I just want to add my appreciation as
9 so well stated by Elana and particularly to Kim for
10 doing a nice job of organizing your whole group and the
11 testimony and prefile testimony. Obviously a lot of
12 time and effort was put into it.

13 THE HEARING OFFICER: If that's it, then we're
14 adjourned. Have a wonderful weekend, and we'll see you
15 in September.

16 (Whereupon, the proceedings in the
17 above-entitled cause were
18 adjourned until September 11,
19 2000, at 10:00 a.m.)

20
21
22

23

24

L.A. REPORTING
(312) 419-9292

163

1 STATE OF ILLINOIS)

2) SS:

3 COUNTY OF C O O K)

4

5 I, MELISSA BELICE, do hereby certify that the
6 testimony then given by all participants of the
7 rulemaking hearing was by me reduced to writing by
8 means of machine shorthand and afterwards transcribed
9 upon a computer, and the foregoing is a true and
10 correct transcript.

11 I further certify that I am not counsel for
12 nor in any way related to any of the parties to this
13 procedure, nor am I in any way interested in the
14 outcome thereof.

15

16

17

18

19

Melissa Belice, CSR

20

21

22

23

L.A. REPORTING
(312) 419-9292