

1                   BEFORE THE POLLUTION CONTROL BOARD

2                                 STATE OF ILLINOIS

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5         IN THE MATTER OF:

6         REGULATION OF PETROLEUM LEAKING

7         UNDERGROUND STORAGE TANKS

8         (35 Ill. Adm. Code 732)

Docket No. R97-010

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15                 Hearing held, pursuant to Notice, on the 9th day

16         of December, 1996, at the hour of 10:00 a.m., at

17         Room A-1, William Stratton Office Building,

18         Springfield, Illinois, before Ms. Marie Tipsord, duly

19         appointed Hearing Officer.

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23                                 TRANSCRIPT OF PROCEEDINGS

24

## 1 PRESENT:

2 MR. G. TANNER GIRARD Board Member  
 MR. JOSEPH YI Board Member  
 3 MR. CHARLES M. FEINEN Attorney, IPCB  
 MS. K. C. POULOS Attorney, IPCB  
 4 MR. ANAND RAO Environmental Scientist,  
 IPCB  
 5 MS. KIMBERLY A. ROBINSON Assistant Counsel,  
 Bureau of Land, IEPA  
 6 MS. VICKY VonLANKEN Assistant Counsel,  
 Bureau of Land, IEPA  
 7 MR. GARY P. King, Manager Division of Remediation  
 Management,  
 8 Bureau of Land, IEPA  
 MR. DOUGLAS W. CLAY Manager, LUST Section,  
 9 Bureau of Land, IEPA  
 MR. DAVID L. RIESER Attorney at Law  
 10 MR. JOHN W. WATSON, III Attorney at Law  
 MR. MICHAEL W. RAPPS, P.E. Rapps Engineering &  
 11 Applied Science  
 MR. PETER D. GATES Field Engineer,  
 12 Mobil Business  
 Resources Corporation  
 13  
 14  
 15  
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1                   HEARING OFFICER TIPSORD: Let's begin. Good  
2 morning.

3                   Once again, my name is Marie Tipsord, and I am the  
4 Hearing Officer for the Illinois Pollution Control  
5 Board in this proceeding known as Regulation of  
6 Petroleum Leaking Underground Storage Tanks, 35 Ill.  
7 Adm. Code 732, Board Docket Number R97-10.

8                   With me today are two of the presiding Board  
9 Members. To my immediate right is Dr. G. Tanner  
10 Girard, and to my left is Mr. Joseph Yi. To Mr. Yi's  
11 left is his assistant, Charles Feinen. To Dr.  
12 Girard's right is Anand Rao with our Technical Unit,  
13 and to his right is K. C. Doyle, assistant to Board  
14 Member J. Theodore Meyer, who is the other presiding  
15 Board Member.

16                   This proceeding was filed pursuant to Public Act  
17 89-457, and it was filed on September 16th, 1996.  
18 Pursuant to that Public Act, the Board must adopt a  
19 final rule on or before March 15, 1997. As of this  
20 date there has been no extension of that date.

21                   The purpose of today's hearing is to allow the  
22 Agency the opportunity to follow up with some  
23 additional comments regarding comments which arose  
24 during the first hearing, and to present testimony on

1    behalf of the Illinois Petroleum Council and the  
2    Petroleum Marketers Association.  Those are the  
3    prefiled testimonies we have received.

4            If there are any additional testimonies at the end  
5    of the hearing, we will allow them as time permits.

6            We will also allow questioning of the witnesses  
7    today with special deference to the Illinois  
8    Environmental Protection Agency's prefiled questions.

9            We will begin this hearing today with allowing the  
10   Agency to complete its comments.  And I believe the  
11   Agency has some exhibits which we'll admit during  
12   those comments.

13           Are there any questions with how we're going to  
14   proceed today?

15           Seeing none, Ms. Robinson, would you like to  
16   begin?

17                    MS. ROBINSON:  Good morning.  My name is  
18   Kimberly Robinson.  I'm Assistant Counsel with the  
19   Division of Legal Counsel, Illinois Environmental  
20   Protection Agency.

21           As an initial matter, I would like to introduce  
22   Doug Clay to my immediate right.  He is the Manager of  
23   the Leaking Underground Storage Tank Section for the  
24   Bureau of Land, and to his right Gary King, the

1 Manager of the Division of Remediation Management for  
2 the Bureau of Land, both at IEPA. And behind me we  
3 have Vicky VonLanken, who is our legal investigator  
4 here today.

5 If I could start by identifying three more  
6 exhibits for the record.

7 We have Exhibit Number 3, which I had the court  
8 reporter mark for identification. It's a letter from  
9 Gardner, Carton & Douglas as a follow-up to the first  
10 set of hearings and also a follow-up to our Errata  
11 Sheet Number 1.

12 And the second one, which is Exhibit Number 4, a  
13 letter from Ross & Hardies, which is also a follow-up  
14 to the first set of hearings and follow-up to our  
15 Errata Sheet Number 1.

16 And Exhibit Number 5, which is our actual Errata  
17 Sheet Number 1, which was dated November 22nd, 1996.

18 And if there's no objection, I would move to have  
19 these admitted into the record at this time.

20 HEARING OFFICER TIPSORD: Is there any  
21 objection?

22 Seeing none, we will admit those.

23 (Exhibits 3, 4 and 5 admitted.)

24 HEARING OFFICER: Oh, I'm sorry.

1 MR. RIESER: I have no objection.

2 David Rieser from the Illinois Petroleum Council.

3 Just for the record I would like to note that the  
4 errata sheet was issued and received by myself and I  
5 also believe Mr. Watson before we submitted our  
6 letters. So I think both letters reference the errata  
7 sheet.

8 HEARING OFFICER TIPSORD: Okay, thank you.

9 MS. ROBINSON: And I think the easiest way  
10 for us to proceed would be to have Gary King do a  
11 summary of what's in the errata sheet and then we can  
12 proceed with the two letters and try to address all  
13 the issues that arose in those letters.

14 HEARING OFFICER TIPSORD: Before we proceed,  
15 do you have extra copies of the letters? Because we  
16 don't have one up here at all.

17 MS. ROBINSON: I have -- do we have one extra  
18 copy? We have one extra copy of each. And there are  
19 several extra copies of our errata sheet over on the  
20 rail over there.

21 Mr. King, if you would please give a summary of  
22 Errata Sheet Number 1.

23 MR. KING: I thought we had a very good  
24 discussion at the last hearing on November 18th, and I

1 think the comments that we received in terms of the  
2 questions that were asked was -- I thought were very  
3 helpful in focusing on various issues within the  
4 context of our proposal. And as a result of those  
5 questions, we thought it was appropriate to go back  
6 and make some further modifications to our proposal  
7 that was filed on September 16th.

8 So Errata Sheet Number 1 is really -- basically is  
9 looking at those issues. I'll point out the two or  
10 three places where in essence we weren't directly  
11 responding to comments but in essence picked up some  
12 other issues to be resolved.

13 I should note that, turning to page 2, for  
14 instance, where there's a double underlining, we did  
15 that because the -- in that subsection, for instance,  
16 300(b)(1), the original section was being -- already  
17 being proposed to be modified, so the double  
18 underlining represents the new language changes we  
19 would be suggesting.

20 The change -- we did -- there's a change on  
21 302(a)(4), 303(d), 304(d). Those were not -- that was  
22 not anything discussed at the last hearing, but we  
23 just thought, again, it was to make sure that we're  
24 using terminology consistently, and that's kind of a

1 leftover. The use of the word "site" is a leftover.  
2 To be consistent we should use the term UST system.

3 On the next -- on page 3, 310(g)(3), just a  
4 typographical change from cleanup to remediation.

5 And in 403(d) there's a change from plant to plan.

6 Other than those, I believe those are -- all the  
7 other changes are really intended to address specific  
8 points that were raised at the hearing on November  
9 18th.

10 And unless there's further questions, I wouldn't  
11 have any additional comments at this time on that.

12 HEARING OFFICER TIPSORD: Are there any  
13 questions concerning the errata sheet?

14 Mr. Rieser.

15 MR. RIESER: Mr. King, I just had a couple of  
16 questions.

17 HEARING OFFICER TIPSORD: Could you speak up,  
18 Mr. Rieser?

19 MR. RIESER: I'm sorry. I had a couple of  
20 questions.

21 The first one was regarding 732.300(b)(1) on page  
22 2 of the errata sheet. With respect to (b)(1)(A),  
23 which says, "There is evidence that groundwater wells  
24 have been impacted by the release above the Tier 1



1 residential numbers ..." et cetera. If an  
2 owner/operator can demonstrate that the exceedence in  
3 the groundwater above the Tier 1 levels is not as a  
4 result of their release, would that mean that it would  
5 not meet this condition?

6 MR. KING: The purpose of this is to identify  
7 a situation where you have to do some further  
8 investigation, and I think, as I understand the  
9 example you're stating, that is reflective of doing  
10 additional investigation to be able to make that kind  
11 of conclusion.

12 MR. RIESER: Well for --

13 MR. KING: So --

14 MR. RIESER: Go ahead. I'm sorry.

15 MR. KING: I guess in a specific situation  
16 what you're anticipating doing probably would, you  
17 know, fit in with the context of doing a groundwater  
18 investigation anyway.

19 MR. RIESER: Well, for example, if you had a  
20 gasoline tank and the exceedences of the Tier 1 levels  
21 was an entirely different contaminant, say a  
22 chlorinated solvent, that would not trigger this, is  
23 that correct?

24 MR. KING: That's correct.

1 MR. RIESER: Thank you.

2 With respect to (b)(1)(B) you've added free  
3 product "that may impact groundwater." How will that  
4 determination be made?

5 MR. KING: That will have to be on a  
6 site-specific basis.

7 MR. RIESER: What factors will the Agency use  
8 in making that decision?

9 MR. CLAY: I think what we would look at is  
10 -- could be a number of things, including the geology  
11 of the site, the amount of free product, depth of  
12 groundwater are just a few issues that we would take  
13 into consideration.

14 MR. RIESER: So objective and pragmatic  
15 issues regarding the site would all be usable as  
16 factors in making this determination?

17 MR. CLAY: Correct.

18 MR. RIESER: Thank you.

19 HEARING OFFICER TIPSORD: Are there any  
20 additional questions?

21 MR. RIESER: Not with respect to the errata.

22 HEARING OFFICER TIPSORD: Okay. Seeing none,  
23 if you would like to proceed.

24 MS. ROBINSON: I think I would like some

1 input here as to whether or not Mr. Watson and Mr.  
2 Rieser would like to read their comments from the  
3 letters in or how would you like to handle that?  
4 Would that be the easiest way?

5 MR. RIESER: However the Board would prefer.  
6 I'll be happy to read mine if the Board would like  
7 that.

8 HEARING OFFICER TIPSORD: Let's go off the  
9 record for just a second.

10 (Discussion off the record.)

11 HEARING OFFICER TIPSORD: Mr. Rieser, we'll  
12 have you summarize, then direct your comments to the  
13 Agency from I believe it's Exhibit Number 4.

14 MR. RIESER: Exhibit Number 4, yes, Ms.  
15 Tipsord.

16 The first -- this was a letter that I wrote on  
17 behalf of the Illinois Petroleum Council after we  
18 received the errata, and this letter was intended to  
19 embody the -- some of the issues that I saw as still  
20 remaining after the hearing, some of which were  
21 resolved by the errata and some of which were not.

22 The first issue was with respect to Section  
23 732.307(d)(2). And I said: "The issue here is the  
24 limitation of physical testing to those units most

1 likely to transport contaminants off site and not each  
2 stratigraphic unit."

3 In breaking away from the letter, I would like to  
4 say that this was an extended discussion that we had  
5 both at the hearing and prior to the hearing regarding  
6 the requirements in 307(d)(2) to test each  
7 stratigraphic unit. This is in the context of the  
8 Method Two soil classification. There's a very narrow  
9 definition of stratigraphic unit, and then each of  
10 those defined units has to be tested according to the  
11 Agency's proposal.

12 The Agency indicated at the hearing that they  
13 would modify that to address those units which were  
14 most conducive to contaminant transport, which is the  
15 point of the Method Two evaluation, to look for -- to  
16 look to determine whether those most permeable units  
17 would allow the transport of materials away from -- of  
18 contaminants away from the site.

19 Going back to the letter, what I said was: "Since  
20 permeability is not defined and is not the only issue  
21 to be considered, we propose the following:

22 The following tests shall be performed on a  
23 representative sample of" -- we struck each and added  
24 -- "the stratigraphic units encountered in the native

1 soil boring" -- this was the language we added --  
2 "which are most conducive to transporting contaminants  
3 from the source, based on visual observation."

4 That was the proposal.

5 MR. CLAY: The Agency, as we stated in the  
6 last hearing, does believe that the unit that we're  
7 most concerned with is the one that is most conducive  
8 for transporting contaminants. However, we do not  
9 believe that this can be determined visually. We've  
10 had a number of situations where an engineer or  
11 geologist when doing the soil boring has identified a  
12 unit as a certain -- by a certain classification, such  
13 as a clayey silt, and when they actually do the  
14 physical testing of that unit, it's something much  
15 different. So we do not believe that you can  
16 determine visually -- without doing the physical soil  
17 testing that's required, we don't believe you can  
18 determine what unit is going to be the most  
19 conducive.

20 The tests that are required are fairly  
21 inexpensive, in the range of 500 dollars for the  
22 entire testing per stratigraphic unit, and we  
23 typically see two to three stratigraphic units for a  
24 Method Two classification. So we don't think that

1 this change is justified.

2 And that one of the problems we see is by making  
3 this change this could set up a situation where we  
4 have a lot more appeals because the engineer or  
5 geologist sampled one stratigraphic unit which they  
6 thought was most conductive and the Agency disagrees  
7 and ends up denying the classification because of  
8 that.

9 MR. RIESER: Is the issue, Mr. -- does that  
10 complete your response?

11 MR. CLAY: Yes, yes.

12 MR. RIESER: Is the issue the visual part of  
13 the determination or limiting or allowing the  
14 geologist or whoever is doing the sampling in  
15 precluding them from making field determinations of  
16 any sort with respect to which unit or units they  
17 believe are the most conducive to transporting  
18 materials off the site?

19 MR. CLAY: I don't think it's an issue of  
20 precluding the geologist or engineer from making any  
21 field judgments. It's -- the problem comes when the  
22 judgments that are made the Agency doesn't agree with  
23 or concur with, and then you've got to do additional  
24 sampling, additional testing, modifying budgets, that

1 type of thing, rather than testing each stratigraphic  
2 unit initially, which as I said, is typically we've  
3 seen two or three stratigraphic units per Method Two  
4 evaluation.

5 And frankly, the visual -- visually identifying  
6 these units following -- followed up with testing  
7 hasn't concurred. I mean we'll see someone classify  
8 or identify one unit visually and it be something  
9 completely different once they do the particle size  
10 analysis.

11 MR. RIESER: What I'm trying to do is kind of  
12 separate purely the visual, i.e. just the observation,  
13 from the other information that a geologist would have  
14 in the field without doing actual soil classification  
15 testing of the type that you require. There are other  
16 field measurements that people make in doing the  
17 logging of the sample, isn't that correct?

18 MR. CLAY: Actually, I'm not sure about that.

19 MR. RIESER: Okay. So issues such as -- so  
20 the answer -- okay, never mind.

21 Okay. I understand.

22 Going on to the next point. This was with regard  
23 to 732.307(d)(2)(B), and I said: "Here, we were  
24 concerned with the requirement to calculate a yield

1 value even though Doug Clay acknowledged in his  
2 testimony that this value would not be meaningful if  
3 there was no water bearing strata in the boring. He  
4 also testified that the calculated value might  
5 eliminate a site from consideration as a No Further  
6 Action site even if there was no water to produce a  
7 yield. We suggest the following addition to be  
8 inserted after the sentence which begins 'Well yield  
9 should be determined ...' "

10 This was the additional language. "If the boring  
11 does not accumulate water after completion of the  
12 drilling, the yield does not have to be calculated."

13 That's the conclusion of the additional proposal.

14 "This would also require the following addition to  
15 the end of 732.307(d)(3)(C):"

16 This was my proposed language which was in  
17 parentheses: "(unless the calculation of a yield has  
18 been excluded pursuant to Section 732.307(d)(2)(B)."  
19 And that was closed parentheses.

20 MR. CLAY: We believe that it is important to  
21 provide both the hydraulic conductivity and yield  
22 numbers for each unit. You do a field measurement or  
23 lab measurement to test -- to do either the yield or  
24 the hydraulic conductivity and then calculate the



1 other from that.

2 In Mr. Rieser's proposal, just because a unit does  
3 not accumulate water doesn't mean that at some point  
4 there won't be water in that unit. This doesn't  
5 account for seasonal fluctuation of groundwater  
6 elevations. We believe that the calculation is very  
7 simple. As one of my geologists has stated, it's a  
8 two-minute calculation if you've got the hydraulic  
9 conductivity to calculate the yield. And to make a  
10 demonstration that seasonal fluctuation is not an  
11 issue is probably more resource intensive and takes  
12 more time and is more costly than simply doing the  
13 calculation. So, we would like to see both the yield  
14 and hydraulic conductivity provided to the Agency in  
15 all cases.

16 Let me also just real briefly in layman's terms  
17 define the two terms. Yield is a ratio of volume of  
18 water that a given mass of saturated rock or soil will  
19 yield by gravity to a volume of that mass, and the  
20 hydraulic conductivity is the ability of the substance  
21 to conduct a fluid.

22 MR. RIESER: At the last hearing I asked a  
23 series of questions about providing the analytical  
24 methods which the Agency would recognize in

1 calculating the yield. Is the Agency prepared to do  
2 that today?

3 MR. CLAY: Yeah. There's -- I've got -- the  
4 most common ones the Agency has seen are -- and I'm  
5 going to spell these -- Bouwer and Rice Equation,  
6 B-o-u-w-e-r and R-i-c-e, Theis, T-h-e-i-s, which is a  
7 different equation, the Hantush-Jacob,  
8 H-a-n-t-u-s-h-J-a-c-o-b, Theim Equation, T-h-e-i-m,  
9 and the -- I'm just going to spell this one  
10 H-v-o-r-s-l-e-v Equation. Those are the ones the  
11 Agency sees most often, but there are numerous other  
12 equations that would be acceptable.

13 MR. RIESER: So derivations of equations  
14 based on any of those would be acceptable?

15 MR. CLAY: The Agency would have to evaluate  
16 those derivations, but they potentially could be  
17 acceptable, yes.

18 MR. RIESER: So even though your testimony  
19 was that it's not meaningful to calculate yield for a  
20 dry zone and even though that calculation might knock  
21 a facility out from being a No Further Action  
22 facility, you still believe that that should be done  
23 and that should be a basis for determining that a site  
24 is not a No Further Action facility?

1           MR. CLAY: Yes, because the seasonal  
2 variation is not taken into account. So even though  
3 there is no water in that unit at a given time does  
4 not mean there will not be water at another point in  
5 time.

6           MR. RIESER: And the reason yield is even an  
7 issue in this context is based on the importation of  
8 the Board's definition of what is a Class I  
9 groundwater from Part 620, correct?

10          MR. CLAY: I believe that that's where the  
11 conditions under which you'd do a Method --

12          HEARING OFFICER TIPSORD: Doug, can you speak  
13 up? We have a noise source up here, and when you turn  
14 your head, we lose your voice completely.

15          MR. CLAY: Okay, I'm sorry.

16          I believe from 620 is where many of the  
17 requirements for a Method Two demonstration, including  
18 the yield and hydraulic conductivity, were derived  
19 from, yes.

20          MR. RIESER: Isn't the language for what  
21 constitutes a Method Two No Further Action site taken  
22 directly from 620?

23          MR. CLAY: I think there were some wording  
24 changes, but, yes, it was derived from 620.

1           MR. RIESER: And the language in 620 is being  
2 applied to an actual water-bearing aquifer, correct?

3           MR. CLAY: Yes.

4           MR. RIESER: Thank you.

5           HEARING OFFICER TIPSORD: Any other  
6 follow-up?

7           Okay, Mr. Rieser, would you like to continue?

8           MR. RIESER: The next issue was  
9 732.307(j)(1), which I think the Agency addressed  
10 satisfactorily in its errata. I'm going to leave that  
11 one. That was number 3.

12          Number 4 was with respect to 732.312(a)(1), and I  
13 said: "To codify Doug Clay's testimony that this  
14 election can be made at any time, we propose the  
15 following sentence to be added at the end of this  
16 subsection:"

17          The proposed language was: "Such election may be  
18 made at any time until the Agency issues a No Further  
19 Remediation Letter."

20          And I added that: "You may wish to add a Board  
21 note which indicates that the Agency will not  
22 reimburse the cost of performing more than one method  
23 of site classification."

24          MR. CLAY: We agree with the statement in the

1 proposed changes.

2 MR. RIESER: So you're going to propose a  
3 subsequent errata which embodies those changes?

4 MR. CLAY: Yes. And I think it is a good  
5 idea to include that Board note if at all possible.

6 MR. RIESER: Thank you.

7 My next proposal was with regard to 732.312(c).  
8 And what I said was: "The use of the phrase 'physical  
9 soil classification' is inappropriate since it is a  
10 statutorily defined term which refers to the tasks  
11 necessary to compare the soil to the Berg map.  
12 Although the regulation contains a slightly different  
13 definition, the connotation and connection with the  
14 tasks defined in Section 732.307 is still very strong.  
15 Yet as Doug Clay acknowledged, the tasks outlined in  
16 Section 307 would not be required for soils under this  
17 section. We propose deleting the term 'physical soil  
18 classification' and substituting soil investigation."

19 MR. KING: We don't think this is a good  
20 change. We were very specific in the reason why we  
21 picked physical soil classification and that was  
22 because it's really consistent with the Board's  
23 authority. Unless this -- the Board's authority to  
24 delineate an additional Method Three, as we've kind of

1 called this, comes from 57.7(b)(6) of the Act. And  
2 there's a specific reference there to authorizing the  
3 Board to adopt additional methods for purposes of  
4 physical soil classification. And if we take out that  
5 term here and substitute something else, then I think  
6 it throws into question the Board's authority to even  
7 adopt Method Three.

8 MR. RIESER: So the issue is not that -- not  
9 that the investigation required for soils under 312 is  
10 -- let me start over.

11 You agree that the investigation required under  
12 Section 312 for soils is different than the  
13 investigation required under 307, correct?

14 MR. KING: That's correct.

15 MR. RIESER: And so the concern with making  
16 the change is because the -- not using the term  
17 physical soil classification might call into question  
18 the Board's authority to adopt this Section 312?

19 MR. KING: That's correct.

20 MR. RIESER: Okay, thank you.

21 My next comment was on 732.403(i), which had to do  
22 with -- which the Agency addressed in its errata. I  
23 had a simpler suggestion, and I may just put that  
24 before the Board in our posthearing comments rather

1 than burdening here. I think my language is simpler,  
2 but their language accomplishes the same goal.

3 My next comment was on Section 732.503(f), which  
4 said: "We propose adding language to clarify that a  
5 report rejected by operation of law can be  
6 resubmitted. We suggest the following language to be  
7 placed at the end of this section:"

8 We proposed: "Any plan or report rejected by  
9 operation of law may be resubmitted by the owner or  
10 operator."

11 MR. CLAY: The Agency concurs with that. We  
12 may also suggest in the next errata that we add the  
13 90-day extension wording, too.

14 MR. RIESER: Thank you.

15 My next comment was with respect to 732.703(b),  
16 which has to do with the copy of a recorded document.  
17 And the Agency made a change in its errata, but I have  
18 a concern with that that I -- makes me want to just  
19 read in what I had, and then we'll go from there.

20 Section 732.703(b). "We discussed at the hearing  
21 that the Agency would accept a copy of the recorded  
22 document so long as it reflected the various stamps  
23 from the Recorder's office indicating it had been  
24 recorded. Your proposed revision still requires a

1 'official' copy which implies that the copy of the  
2 original must be obtained from the Recorder's office  
3 despite my understanding of the testimony that this  
4 was not necessary. We suggest that the Agency add  
5 after 'certified' the phrase or accurate."

6 MR. KING: What we're looking for is -- and  
7 maybe it's just kind of stumbling around the real  
8 meaning of this language. What we want is a copy that  
9 shows it's been filed with the Recorder and so we see  
10 that we have that coming back to us and we put it in  
11 our records and it shows that there's -- it was in  
12 fact filed and it's got that original -- original  
13 stamp on it as having been filed. That's the issue  
14 for us and that's what we would consider something to  
15 be accurate and official. So basically a file-stamped  
16 copy.

17 MR. RIESER: Is it correct that the Agency  
18 does not want a -- is not requiring an additional  
19 document from the Recorder's office verifying the  
20 authenticity of the copy that they are receiving?

21 MR. KING: Right. That's correct. Just so  
22 it's a file-stamped copy. We don't have to have a  
23 separate certification.

24 MR. RIESER: So a person could take a copy of



1 their original recorded document, make a copy of that  
2 that reflected all the stamps indicating that it had  
3 been recorded and submit that to the Agency and that  
4 will be acceptable.

5 MR. KING: We want an original stamp. We  
6 want an original stamp on it.

7 MR. RIESER: So you want the original  
8 document.

9 MR. KING: No. We want -- we want a document  
10 that shows an original stamp on it.

11 MR. RIESER: Okay.

12 HEARING OFFICER TIPSORD: Mr. King, would it  
13 be acceptable if someone just took in two copies, one  
14 to give and leave with the clerk, and the second to  
15 have it stamped?

16 MR. KING: Yes, exactly. That's what I  
17 was --

18 MR. RIESER: Would a certification  
19 from the PE that the document had been filed be  
20 adequate?

21 MR. KING: No.

22 MR. RIESER: All right. My next point was on  
23 732.704(a)(4), and this is with respect to the voiding  
24 of the NFR letter based on additional information.

1 And I think there was a real issue with this because  
2 there was testimony that this could be done on the  
3 basis of identification of contaminant levels in  
4 excess of Tier 1 residential values from Part 742  
5 regulations. And I had numerous problems with -- the  
6 Illinois Petroleum Council had numerous problems with  
7 that, which I addressed.

8 First of all, in the testimony before the Board on  
9 Part 740, Mr. Eastep of the Agency testified that it  
10 would take something more than mere exceedences of  
11 Tier 1. It would take a site evaluation based on a  
12 review of all pathways and conditions at the site  
13 before the Agency would void a letter under NF --  
14 under the analog to the same section under proposed  
15 Part 740 rules.

16 And it struck me that with these regulations there  
17 was even more need to be restrictive about the  
18 conditions under which you could void an NFR letter.

19 I said: "First, it should be clear that NFR  
20 letters issued to NFA or Low Priority sites that are  
21 deemed complete based on the statutory criteria scheme  
22 cannot be voided under this subsection, with the one  
23 exception of NFA sites at which there is a finding of  
24 groundwater exceedences under Section 732.302(b). To

1 do otherwise would violate the direct legislative  
2 finding as to how those sites should be resolved and  
3 create vast uncertainty as to the finality of those  
4 NFR letters."

5 In other words, those sites may exceed the Parts  
6 732.

7 "The second issue is that those letters are based  
8 on very specific releases from identified units and  
9 are even more narrowly focused than the 'focused' site  
10 investigations are handled in 35 Ill. Adm. Code 740."

11 Here we know the source, we know the contaminants  
12 involved in the release, so you don't have a concern  
13 that you would have under the Site Remediation Act  
14 that there would be unidentified contaminants from an  
15 unidentified source. The Agency would be giving a  
16 broader NFR letter than would be necessary or  
17 appropriate under actual site conditions.

18 I propose to the Agency that they delete this  
19 section entirely, because it really wasn't applicable  
20 to the tank program. The Agency can obviously propose  
21 to the Board to void a letter based on fraud or  
22 misrepresentation of the conditions, but to delete a  
23 -- to void an NFR letter because additional  
24 contaminants were found simply because they exceeded

1 Tier 1 values was just inappropriate and inconsistent  
2 with the statute.

3 It would still be my recommendation that the  
4 Agency consider proposing that this section be  
5 deleted.

6 MR. KING: I thought the points that Mr.  
7 Rieser raised were all valid ones for consideration  
8 and evaluation except the last one, because I don't  
9 think we should go so far as to deleting the concept.  
10 We have come up with some additional language which  
11 we've intended to kind of meet the concerns that were  
12 raised and yet still maintain the concept that was in  
13 the proposal.

14 This would be language that we would propose as  
15 part of a second errata. I'm going to read the  
16 language of this proposed section and I'll indicate  
17 which is new language as I'm reading through it.

18 It's Section 732.704(a)(4). Subsequent discovery  
19 of -- and then there would be an added word --  
20 indicator contaminants -- and then we're going to add  
21 the phrase -- related to the occurrence upon which the  
22 No Further Remediation Letter was based but which were  
23 -- and then we continue with the rest of the section,  
24 which says -- not identified as part of the

1    investigative or remedial activities upon which the  
2    issuance of the No Further Remediation Letter was  
3    based that pose a threat to human health or the  
4    environment.

5           What we saw as being the critical concern of the  
6    comments that were brought forward was that it needed  
7    to -- we needed to make sure that we were -- we were  
8    narrowing the application of this concept to the  
9    occurrence that was originally dealt with, that was  
10   originally reported, and which the remediation efforts  
11   addressed.  So that's why we added this language of  
12   being related to the occurrence.

13           So that it's clear, if, for instance, if you have  
14   subsequent discovery of contaminants that were not  
15   related to that occurrence, well, that would not be  
16   cause to void the NFR letter that was issued.  That  
17   would simply be another occurrence that would have to  
18   be remediated.

19           Similarly, if you had a situation where you had  
20   identified -- you'd done an investigation and you  
21   identified contaminants and then you have a subsequent  
22   discovery of contaminants that were already part of  
23   that investigation, well, that wouldn't be cause for  
24   No Further Remediation -- avoidance of a No Further

1 Remediation Letter, either.

2 But if you did have a situation, for instance,  
3 where the owner/operator had totally mischaracterized  
4 the extent of the contamination and it was related to  
5 the release that was reported, then that would be the  
6 kind of situation where it would be a subsequent  
7 discovery that would fall within the context of being  
8 voidable relative to the No Further Remediation Letter  
9 on which it was based.

10 The language here continues to talk about posing a  
11 threat to human health or the environment, so I don't  
12 think just an exceedence of the Tier 1 numbers would  
13 automatically put anybody into that kind of situation.  
14 It would have to be evaluated on a site-specific  
15 basis.

16 MR. RIESER: Just taking out the last point  
17 first, what would the factors be -- what factors would  
18 be used in evaluating?

19 HEARING OFFICER TIPSORD: Mr. Rieser, could  
20 you speak up?

21 MR. RIESER: I'm sorry.

22 Taking the last point first, what factors would be  
23 used in making that evaluation?

24 MR. KING: We'd have to look at how high the

1 levels were, what potential receptors could be  
2 impacted, what potential migration pathways would be  
3 in existence, the kind of site-specific factors that  
4 we envision using under the Part 742 rules.

5 MR. RIESER: And the Part 740 rules, correct?  
6 740?

7 MR. KING: I said 742.

8 MR. RIESER: Okay. I see. But also the same  
9 as the factors you would use in voiding NFR letters  
10 under Part 740, which --

11 MR. KING: Oh, yes, that's correct.

12 MR. RIESER: -- contains the same language.

13 MR. KING: That's correct.

14 MR. RIESER: The language says subsequent to  
15 discovery of indicator contaminants related to the  
16 occurrence but which were not identified as part of  
17 the investigation. So if there was a gasoline tank  
18 and BETX were the indicator contaminants that were  
19 identified, and subsequently PNAs or used oil  
20 indicator contaminants were identified at the site,  
21 would that be a basis for voiding the NFR letter?

22 MR. KING: No, that wouldn't be. Again,  
23 you'd have to -- unless -- unless there was a  
24 situation where the -- for instance, the contaminants

1 in the tank were originally mischaracterized.

2 MR. RIESER: If -- going back to the example  
3 of a gasoline tank, if you had a gasoline tank which  
4 had a release and the site was determined to be an NFA  
5 site based on the soil geology according to Method One  
6 or Method Two, and a subsequent owner determined that  
7 there were gasoline constituents on the site, and it  
8 was only soil contamination, but let's say it was  
9 significant soil contamination, would that be a basis  
10 for voiding the NFR letter?

11 MR. KING: It would depend on whether that --  
12 whether those contaminants were there related to the  
13 occurrence that was originally managed.

14 MR. RIESER: Well, again, assuming that they  
15 are only the indicator contaminants associated with  
16 the gasoline tank.

17 MR. KING: Well, you still could have -- you  
18 still could have gasoline contamination on a site that  
19 was not -- that was there but not as the result of a  
20 specific release that had been dealt with previously  
21 under the tank program. And if that -- that  
22 contamination was found, that would not subject the  
23 letter to be voided.

24 MR. RIESER: If that contamination was part



1 of the original release, that would not be subject to  
2 being voided?

3 MR. KING: If it was part of the original  
4 release, yes, it would.

5 MR. RIESER: I'm sorry, I misunderstand.

6 MR. KING: Let me give you a different  
7 example. For instance, if you had a release from tank  
8 one and that's all you addressed, and you cleaned up  
9 that contamination and that was -- the BETX was the  
10 indicator contaminants. If on another part of the  
11 site, a totally different tank field, you could have  
12 another tank there, which is kind of common, you could  
13 also find BETX there if it was a gasoline tank. If  
14 you found that BETX, that would be a totally separate  
15 release. It wouldn't have any effect on the first NFR  
16 letter.

17 MR. RIESER: Okay, I understand. So that  
18 first NFR letter wouldn't be voidable based on that  
19 second release, is that correct?

20 MR. KING: That's correct. It would not be  
21 voidable.

22 MR. RIESER: Thank you.

23 HEARING OFFICER TIPSORD: Mr. Watson.

24 MR. WATSON: For the record, my name is John

1 Watson from Gardner, Carton & Douglas.

2 I don't know -- at least in my mind, I don't know  
3 if we've resolved the issue fully, and I guess what  
4 I'm hearing you say is that you can have a site that  
5 you've got a No Further Action determination or a Low  
6 Priority determination, both of which say that or both  
7 of which are based upon conditions unrelated to soil  
8 contamination. Is that right?

9 I mean if you've got sites where -- I mean for No  
10 Further Action, basically you look at the geology, and  
11 if you can confirm the appropriate geology for your  
12 site, arguably you have no obligation to do any  
13 sampling; and therefore, soil contamination cannot be  
14 a relevant factor in determining No Further Action  
15 determination. Correct?

16 MR. KING: No, that would not be a proper  
17 characterization of what's required.

18 MR. CLAY: There are other factors besides  
19 the geology of the site that need to be taken into  
20 account.

21 MR. WATSON: Right.

22 MR. CLAY: And in most cases, investigation  
23 of migration pathways does require soil sampling.

24 MR. WATSON: Under the No Further -- under

1 the No Further Action site classification?

2 MR. CLAY: Right.

3 MR. WATSON: And then you have the Low  
4 Priority site classification which says you look at  
5 your geology and then you -- if you don't have  
6 groundwater exceedences and you satisfy some other  
7 criteria, then you're also not required to do any  
8 sampling at that point.

9 MR. KING: That's not correct, either. You  
10 still have the same -- you still are to address all  
11 five pathways.

12 MR. WATSON: So it's your position then that  
13 No Further Action determinations and Low Priority site  
14 classifications are dependent upon the levels of  
15 contaminants in the soil?

16 MR. KING: No, I don't think that's correct.

17 MR. CLAY: I would say that the level of  
18 contamination in the soil --

19 HEARING OFFICER TIPSORD: Doug, we're losing  
20 you again.

21 MR. CLAY: I'm sorry.

22 The level of contamination in the soil is not a  
23 factor for a No Further Action site or Low Priority  
24 site. There are other factors that need to be taken

1 into account, but the degree of contamination, as long  
2 as it's not free product, is not part of that  
3 evaluation.

4 MR. WATSON: Okay. So then how can it be  
5 appropriate under a avoidance -- under 704 to have the  
6 avoidance of a No Further Remediation Letter be  
7 dependent upon the existence of contamination in the  
8 soil for No Further Action and Low Priority sites?

9 MR. KING: Well --

10 MR. WATSON: And I guess let me just say that  
11 just to complete the record, what we have proposed is  
12 language at the end of 704(a)(4) which says that you  
13 can void a No Further Action letter -- No Further  
14 Remediation Letter to the extent that you find  
15 additional contaminants which are directly related to  
16 the release that pose a threat to human health or the  
17 environment, and what we've proposed is "as defined by  
18 the particular criteria upon which the No Further  
19 Remediation determination was based."

20 And I guess what we're trying to get at there is  
21 if soil -- if contamination levels in the soil are not  
22 relevant  
23 to a No Further Action and Low Priority determination,  
24 we believe that those -- that soil contamination can

1 also not be relevant for voiding the No Further  
2 Remediation Letter when you're talking about those two  
3 classes of sites.

4 HEARING OFFICER TIPSORD: For the record let  
5 me point out that Mr. Watson is referring to what is  
6 in point number 5 on Exhibit 3.

7 MR. WATSON: Thank you.

8 MR. KING: Well, to do what you're suggesting  
9 then, I'm not sure -- when you say is defined by the  
10 particular criteria upon which the No Further  
11 Remediation determination was based, well, every --  
12 it's -- every No Further Remediation determination is  
13 based upon compliance with all of the applicable  
14 criteria. So I mean you have to comply with all the  
15 criteria. So I'm not sure what this really means.

16 MR. WATSON: Well, I mean I'm not professing  
17 that the language is all that great, but I guess, you  
18 know, the concept I think is an important one. And I  
19 think Mr. Clay has said that if soil contamination is  
20 not relevant to the issuance of the No Further  
21 Remediation Letter, then we ought to develop a system  
22 where if you're going to void that No Further  
23 Remediation Letter, the levels of soil contamination  
24 should also not be relevant to that determination. I

1 mean isn't that fair?

2 MR. KING: Well, I --

3 MR. WATSON: Because we're going to get --  
4 we're going to have sites where it's a No Further  
5 Action site, there's been no sampling in the soil, and  
6 then maybe a new owner comes in, puts a -- you know,  
7 takes a sample perhaps as part of the due diligence  
8 before the acquisition, comes up with huge benzene  
9 numbers above the Tier 1 levels, and then they want to  
10 go back to the State and reopen this thing. And I  
11 guess it's not so much a concern on the part of  
12 what --

13 MR. KING: I don't see that would be -- what  
14 you just described as a reason to void the NFR letter  
15 under what we've got proposed here.

16 MR. WATSON: Why not? I mean --

17 MR. KING: Well, as I was saying, that --  
18 this -- and I think your comments really pointed this  
19 out as well. The issue is whether the contamination  
20 is related to the occurrence upon which the letter was  
21 based.

22 MR. WATSON: Well, I mean what if it --

23 MR. KING: Just because you find  
24 contamination somewhere on a site doesn't say anything

1 about whether that was related to a specific  
2 occurrence. If a guy takes a sample at a foot below  
3 the surface and the NFR letter was based on a tank  
4 release at ten feet below the surface --

5 MR. WATSON: Right.

6 MR. KING: -- I don't know what that says  
7 about anything as far as that sample near the surface.

8 MR. WATSON: Right. But put it in the  
9 context of a clearly related incident. I mean there  
10 are going to be No Further Action sites, again, where  
11 you perhaps know that there's been a release from the  
12 tank, yet the geology is appropriate for a No Further  
13 Action determination without doing any soil sampling.  
14 Then again, a new owner comes in, takes a soil sample,  
15 finds that, yeah, there is contamination -- benzene  
16 contamination in the soil that is related to the tank  
17 release. It's way above Tier 1 numbers, which I think  
18 everyone understands will, in fact, exist most likely,  
19 given that that benzene number is so low, and then all  
20 of a sudden, you know, they're running to the State  
21 saying, well, we've got to void this No Further Action  
22 determination. And what they're saying is --

23 MR. KING: Then I wouldn't agree that's not  
24 consistent with the language we've got here. Because,

1 again, if those contamination levels were identified  
2 as part of the investigative or remedial activities,  
3 then there wouldn't be a reason for voiding the  
4 letter.

5 MR. WATSON: But they never would -- I guess  
6 what I'm saying is they never would be in the case of  
7 a No Further Remediation site because there isn't a  
8 requirement to do -- you do your 50 foot boring to  
9 confirm the geology and then you're done.

10 MR. KING: In my mind you're really -- you're  
11 really suggesting that we change the drafting of this  
12 rule based on a hypothetical case that I see as being,  
13 I don't know, so rare that I don't know if we'll ever  
14 even run into it. Because you're always going to have  
15 some kind of soil sampling that's going to show  
16 something about what the level of contaminants are  
17 there. So I mean you're presupposing that that's not  
18 going to be the case and I -- I'm just trying to  
19 figure out when that would be the case.

20 MR. WATSON: I guess I would disagree with  
21 you on that. I think that this is a situation that  
22 has come up a lot and we anticipate certainly will  
23 come up with a lot in No Further Remediation and Low  
24 Priority sites. And I guess what we would like the



1 Agency -- because the Agency has said here today that  
2 soil -- the levels of contamination in the soil is not  
3 relevant to a No Further Remediation or Low Priority  
4 determination, I guess --

5 MR. KING: I don't think we said that.

6 MR. WATSON: I believe that that's what Mr.  
7 Clay said. But in any event, we believe that it must  
8 be that voiding the no further determination -- in  
9 voiding the no further determination you cannot rely  
10 on those soil contamination numbers because they are  
11 not relevant to the original determination.

12 HEARING OFFICER TIPSORD: Are there any  
13 further questions or comment on this issue?

14 DR. GIRARD: Could I just ask a clarifying  
15 question of Mr. King?

16 It seems like the important issue here is what  
17 factors is the Agency going to look at in making that  
18 determination about whether something poses a threat  
19 to human health or the environment, and I think I've  
20 heard about five factors mentioned in the  
21 back-and-forth discussion in the last several  
22 questions.

23 These site-specific factors then would be, one  
24 would be contaminant levels; two would be potential

1 receptors; three would be potential migration  
2 pathways; a fourth would be history of the site; and a  
3 fifth would be geology of the site, including any soil  
4 sampling.

5 Now, are there other factors that you would look  
6 at in determining whether some newly-identified  
7 indicator contaminant poses a threat to human health  
8 or the environment?

9 MR. KING: I think generically those are  
10 pretty comprehensive. We were just commenting that  
11 there might also be an issue of groundwater  
12 contamination. I think we talked about potential  
13 receptors that would -- I guess that would also  
14 include land use, potential exposures.

15 DR. GIRARD: Thank you.

16 MR. WATSON: I just -- I just want to get  
17 this at least clear in my mind as to what your  
18 position is, Mr. King, on what do you believe in terms  
19 of a No Further Remediation site -- what is the basis  
20 for your understanding that the level of contaminants  
21 in the soil is somehow relevant to that determination?

22 MR. KING: Would you repeat the question?

23 MR. WATSON: The question is, what is your  
24 understanding as to the relevance of contamination --

1 petroleum contamination in the soil at a No Further  
2 Remediation site?

3 MS. ROBINSON: Do you mean No Further Action  
4 site?

5 MR. WATSON: Yes, I do.

6 MS. ROBINSON: Based on classification?

7 MR. WATSON: Based on -- right. Under  
8 732.302.

9 MR. KING: Are we talking about this in the  
10 context of 732.704(a)(4) or are you broadening this to  
11 some context? I've been trying to focus my answers  
12 specifically on this issue of voidability, and you're  
13 phrasing the question, I think, in a much broader  
14 fashion.

15 MR. WATSON: Okay. I'm sorry. I want to --  
16 what I want to focus on is 732.302, which are the  
17 criteria for establishing a No Further Action site  
18 classification. And I was wondering --.

19 HEARING OFFICER TIPSORD: Excuse me. Mr.  
20 Watson, before we go back to 732.302, I think first we  
21 need to finish with 732.704 and be sure that we're  
22 clear on where we are with 732.704. Because you're  
23 taking us back somewhere that was covered at the first  
24 hearing, and you may have some additional questions in

1 your exhibit, but I would like to close one issue  
2 before we go back to other issues.

3 MR. WATSON: Okay.

4 HEARING OFFICER TIPSORD: I realize they're  
5 connected but -- if that's not a problem.

6 MR. WATSON: The reason I'm asking the  
7 question is because it relates to 704 in my mind, but  
8 if you want me to reserve that, I'm happy to do that.

9 HEARING OFFICER TIPSORD: Yeah. I would  
10 prefer that we finish up with 704 so that we don't go  
11 off on a lot of different areas.

12 MR. WATSON: Sorry.

13 HEARING OFFICER TIPSORD: Is there anything  
14 further on 704?

15 MR. FEINEN: I just have a question about  
16 when a No Further Remediation Letter is issued, yet  
17 it's done based on everything but doing sampling of  
18 the soil. So according to your 704, soil sampling was  
19 not one of the reasons why the letter was issued. If  
20 later someone does find and -- go out and does sample  
21 and does find the high BETX, since the letter wasn't  
22 issued based upon sampling, how would that be a reason  
23 to avoid that -- or void that remediation letter?

24 MR. KING: The issue in my mind is whether

1 that additional information is related to the  
2 occurrence upon which the letter was based.

3 MR. FEINEN: So if it was but it wasn't  
4 required in the issuance of the No Further Remediation  
5 Letter?

6 MR. KING: If that additional information  
7 shows that somehow the extent of contamination  
8 relative to the original release, that it was  
9 mischaracterized, okay, that the contamination that  
10 was found as a part of looking at the release the  
11 first time, somebody goes back in and finds out that  
12 -- through additional sampling or whatever, finds out  
13 that that extent of contamination was highly  
14 mischaracterized, you then may have a situation where  
15 you have something else that needs to be evaluated.  
16 Maybe now you have another problem with migratory  
17 pathways.

18 MR. FEINEN: Well, is it possible for a No  
19 Further Remediation Letter to be issued without  
20 sampling to be done?

21 MR. CLAY: It's -- I guess it's possible, but  
22 I mean there's usually at least sampling done for  
23 migration pathways, natural or man-made migration  
24 pathways. So usually there is some sampling done for

1 those purposes. But it's not to determine the --

2 MR. FEINEN: Extent of the contamination.

3 MR. CLAY: -- concentration necessarily at  
4 any given point. It's more to evaluate natural and  
5 man-made pathways.

6 MR. FEINEN: So I guess I'm trying to figure  
7 out if a remediation letter can be based on  
8 information that doesn't include the extent or the  
9 level of BETX out there and if that's true and then  
10 someone else comes out later and does sampling for the  
11 level of contamination of BETX and says it's high, how  
12 can we go back and say, well, we're voiding your No  
13 Further Remediation Letter because now something of  
14 which we didn't need originally to base that letter on  
15 is now telling us we shouldn't have issued that  
16 letter?

17 MR. KING: I would agree with you.

18 MR. FEINEN: Okay.

19 MR. KING: But again, what I was trying to  
20 point out is what you're using that information  
21 relative to. You can't just void the letter based on  
22 that information, but what does that information tell  
23 you as to what transpired relative to the information  
24 submitted concerning that release.

1           MS. ROBINSON: I don't believe we have  
2 anything further.

3           HEARING OFFICER TIPSORD: Anything further?

4           DR. GIRARD: Well, I'd like to ask a question  
5 that I think hopefully may clarify this.

6           If soil sampling is done and you come up with a  
7 contaminant level, that contaminant level by itself  
8 would not be reason to void the No Further Remediation  
9 Letter because you would then -- you would also look  
10 at these other factors that we've just named. You  
11 would look at potential receptors, potential migration  
12 pathways, history of the site, geology of the site,  
13 land use, groundwater. Is that correct?

14          MR. KING: That's correct.

15          DR. GIRARD: It's not just the level itself.

16          MR. KING: That's correct.

17          DR. GIRARD: Thank you.

18          HEARING OFFICER TIPSORD: Any further on Part  
19 732.704?

20          Okay, seeing none, Mr. Watson, if you would like  
21 to back up to 302.

22          MR. WATSON: Let me just ask one more. I  
23 think that the follow-up that we've had subsequent to  
24 my questions was sufficient to clarify, I think, what

1 the requirements are under --

2 HEARING OFFICER TIPSORD: Speak up.

3 MR. WATSON: I'm sorry.

4 I think that the clarification that was provided  
5 was sufficient to satisfy my questions on some of the  
6 confusion that I had, but let me ask one more  
7 question.

8 At a No Further Action site which is based on  
9 geology under 704, what would be the factors that one  
10 could -- would you look at all the factors that Mr.  
11 Girard had identified in determining whether or not a  
12 No Further Remediation Letter would be voided or would  
13 you focus only on the geological information that  
14 would be called for under 732.302?

15 MR. KING: You'd be looking at all of those  
16 factors. Now, just -- again, just to make sure we  
17 don't get -- you know, you can have an NFA site for  
18 geology, but to get an NFR letter you still have to  
19 look at the other pathway issues. Just so that's  
20 clear.

21 MR. WATSON: And those other pathway issues  
22 that you're referring to, those are set forth in  
23 732.302?

24 MR. KING: That's correct.



1 MR. WATSON: Okay. I've got nothing further.

2 HEARING OFFICER TIPSORD: Okay. Then if it's  
3 all right with the Agency, let's move ahead to a  
4 discussion of the letter presented as Exhibit Number 3  
5 from Gardner, Carton & Douglas.

6 Mr. Watson, in looking at this, I believe point  
7 number 3 is the only issue that wasn't already  
8 covered. Would you agree with that? Or do you have  
9 some follow-up on some of the others?

10 MR. WATSON: No, I think that's fine. 3 and  
11 4 I believe.

12 HEARING OFFICER TIPSORD: Okay. Okay.

13 MR. WATSON: 3 relates to the provision in  
14 the draft -- the proposed regulations that sets forth  
15 the instances where the site work can be deferred, and  
16 specifically there's an exception in the proposed  
17 regulations where there's a threat to human health or  
18 the environment through migratory pathways.

19 I think it was pretty clear at the first hearing  
20 that Mr. Clay had indicated that in looking at that  
21 threat to human health or the environment that would  
22 be done through an examination of the factors set  
23 forth at 732.307(g). And I guess we were wondering  
24 whether or not for clarification purposes we could add

1 a reference to that section.

2 MR. CLAY: Yes, we can add that. We'll  
3 include that in our next errata sheet.

4 MR. WATSON: And number 4 related to Section  
5 732.503(f) and 732.701(c), and this is relating to  
6 appeals from the denial by operation of law. And I  
7 guess one of the questions that we had was can the  
8 Agency propose some language under which we would have  
9 a -- the State would be obligated to set forth the  
10 bases for their denial so we could have, you know --  
11 on appeal we could know what we were appealing, as  
12 opposed to in the circumstances presented in the  
13 proposed regulations where there's a denial and  
14 there's no bases given for the denial?

15 MS. ROBINSON: I'm not sure if maybe we  
16 already answered this question when it came in from  
17 the context of Mr. Rieser's questions. But I think  
18 besides allowing for resubmittal, Mr. Clay stated that  
19 we would also put in some language about 90-day  
20 extensions. Does that help resolve the issue?

21 MR. WATSON: I think so.

22 HEARING OFFICER TIPSORD: Anything further?

23 MR. WATSON: I've got nothing further. Thank  
24 you.

1           HEARING OFFICER TIPSORD: Is there anything  
2 further of the Agency at this time?

3           MR. RIESER: I do have an additional  
4 question, something that I just want to clarify from  
5 the last hearing if I can.

6           I just want to clarify that for Method Three the  
7 point of -- for a Method Three site, which would be a  
8 site evaluated under Section 732.312, the point of  
9 compliance for a Method Three -- that type of site is  
10 at the point of human exposure defined under Part 742,  
11 which in the instance of a -- if there was an  
12 institutional control, it would be the edge of the  
13 institutional control, which would typically be the  
14 property boundary. Is that correct?

15           MR. KING: No.

16           MR. RIESER: Answer this one again then,  
17 Gary.

18           MR. KING: The point of compliance is still  
19 going to be at 200 feet or the property line. The  
20 point of human exposure by moving that may allow you  
21 to establish a different number at your point of  
22 compliance than what otherwise may be the case.

23           MR. RIESER: Okay. Under Section 307 --  
24 thank you for that clarification.

1 Under Section 307(j)(1), there's been a slight  
2 amendment to this, but I'll read the original  
3 proposal, which is: "The Licensed Professional  
4 Engineer shall perform a groundwater investigation in  
5 accordance with this subsection to determine whether  
6 an applicable indicator contaminant groundwater  
7 quality standard has been exceeded at the property  
8 boundary or 200 feet from the excavation, whichever is  
9 less, as a result of the UST release of petroleum."

10 If you look back to Section 312, when we talked  
11 about the scope of the groundwater investigation,  
12 there was a reference back to 307(j)(1), that section.  
13 When I asked Doug Clay at the last hearing regarding  
14 the extent of that investigation, he said yes, that  
15 was the same investigation required under 312.

16 Would you -- I'm sorry, under 307. Would you  
17 agree that you would only have to evaluate groundwater  
18 consistent with the determination of what the  
19 compliance value was at the compliance point as you  
20 described it and not just exceedences of the Tier 1  
21 levels at that point?

22 MR. KING: I would say no. Because the issue  
23 -- there's -- in my mind the process is you're doing  
24 an investigation and what is the criteria for doing

1 the investigation. Okay? The criteria for doing the  
2 investigation are and should be different than what  
3 may be the criteria for -- relative to the compliance  
4 point, what level you have to meet. Because otherwise  
5 -- otherwise, you wouldn't know how you started the  
6 process. Because 312 is really envisioning that  
7 you're going to end up using Part 742 to develop a  
8 remediation objective. Well, how do you even start  
9 that unless you know what your starting point is. And  
10 the starting point is the water -- the groundwater  
11 standards at the 200 feet issue.

12 MR. RIESER: Okay. Let me ask it another  
13 way. 307(j)(1) talks about the purpose of the  
14 groundwater investigation is to determine whether an  
15 applicable indicator contaminant groundwater quality  
16 standard has been exceeded at a certain point. Is it  
17 accurate that the applicable indicator contaminant  
18 groundwater quality standard under 312 can be a  
19 groundwater quality standard determined according to  
20 Part 742?

21 MR. KING: Yes.

22 MR. RIESER: Thank you.

23 HEARING OFFICER TIPSORD: Any further  
24 questions?

1 Ms. Robinson, did you have anything further?

2 MS. ROBINSON: I did. I think also as a  
3 follow-up to the last set of hearings you had  
4 requested the Agency to provide copies of our forms.  
5 We have a couple copies for you. How many do you  
6 need?

7 HEARING OFFICER TIPSORD: Why don't we enter  
8 them as an exhibit, if that's all right with you, as a  
9 group exhibit.

10 MS. ROBINSON: Okay.

11 HEARING OFFICER TIPSORD: We'll call it  
12 Exhibit Number 6.

13 (Exhibit Number 6 admitted.)

14 MS. ROBINSON: Okay. I'll give you a couple  
15 of extra copies also. If you could mark one of those  
16 as Exhibit Number 6, please.

17 If at any time there's a necessity for changing  
18 the forms, you know, I don't know that we need Board  
19 approval for that, but this is what we have to date.  
20 So --

21 MR. CLAY: We are getting ready to go to  
22 printing for a large number of those, but there are  
23 times that we change the forms just because it's, you  
24 know, a better way to do it or we get comments from

1 the regulated community. And so those changes aren't  
2 subject to Board approval. Is that correct?

3 HEARING OFFICER TIPSORD: At this point in  
4 time my answer to that would be I do not anticipate  
5 that the Board would include these as a part of the  
6 regulation. And as such, they are IEPA forms, not  
7 Board forms.

8 MR. CLAY: Okay.

9 MS. ROBINSON: And as a second matter, the  
10 Board had requested that we provide a list of new  
11 appeal points based on the amendments. Would you like  
12 me to do that at this time verbally or would you like  
13 me to do that in final comments?

14 HEARING OFFICER TIPSORD: Whichever is more  
15 comfortable for you. Final comments is fine or we can  
16 put it on the record here. Probably final comments is  
17 best so we have hard copy, I think.

18 MR. RIESER: Actually, if it's not long, I  
19 wouldn't mind hearing it now so if there's something  
20 we disagree with, it can be addressed at the -- it can  
21 be addressed in our comments as well.

22 HEARING OFFICER TIPSORD: Good point, Mr.  
23 Rieser.

24 MS. ROBINSON: Okay. The first one is

1 Section 732.202(g), which has to do with the Agency  
2 approval of special circumstances warranting  
3 continuing corrective action beyond 45 days.

4 The second section is 732.202 -- one moment. Also  
5 Section 202(g), but dealing with the issue of Agency  
6 determination of whether costs incurred beyond 45 days  
7 after a release confirmation are eligible for  
8 reimbursement.

9 The third section would be 302(b) regarding Agency  
10 reclassification of a site as High Priority if  
11 groundwater investigation confirms exceedence of  
12 applicable indicator contaminant objectives.

13 The fourth would be Section 307(j)(6)(C) regarding  
14 Agency rejection of a site-specific evaluation to  
15 demonstrate that a groundwater investigation should  
16 not be required.

17 The fifth would be regarding Section 312(j) on  
18 Agency approval, rejection, or requirement of  
19 modification of any plan or report submitted pursuant  
20 to Section 312.

21 The next one would be regarding 312(l), Agency  
22 approval, rejection, or requirement of modification of  
23 an amended site classification plan or associated  
24 budget plan.



1           The next one is regarding Section 608(b), Agency  
2           determination of which method of apportionment of  
3           costs will be most favorable to the owner or operator.

4           Section 701(c) regarding Agency denial of a No  
5           Further Remediation Letter.

6           704(b) and (c) regarding Agency action to void  
7           previously issued No Further Remediation Letters.

8           And then there's two more that are questionable  
9           that we could be open to comment on.

10          One is 307(j)(3), which is Agency approval of a  
11          request to place groundwater monitoring wells further  
12          from the property boundary or UST system.

13          And Section 404(b)(4) regarding Agency approval of  
14          sufficiency of an engineered barrier relied upon to  
15          achieve compliance with remediation objectives.

16          And I'll, again, address those in final comments  
17          so you have them in writing.

18                   HEARING OFFICER TIPSORD: Thank you, Ms.  
19          Robinson.

20                   MR. RIESER: Ms. Robinson, with respect to  
21          the last two, wouldn't those be part of a filed plan,  
22          either an investigation plan or remedial action  
23          completion plan?

24                   MS. ROBINSON: Yes, they would. But because

1 they're new amendments, it's sort of a twist on the  
2 already appeal point of rejecting or requiring  
3 modification of a plan. So I just wanted to throw  
4 those out as extra issues.

5 MR. RIESER: And what we've addressed, these  
6 are all the additional appeal points that the Agency  
7 has added by their proposed revisions?

8 MS. ROBINSON: That's correct.

9 MR. RIESER: Thank you.

10 HEARING OFFICER TIPSORD: I would just also  
11 like to make a housekeeping note.

12 Mr. King and Mr. Clay were previously sworn at the  
13 first hearing and as such were considered sworn  
14 throughout this hearing. That's why I didn't have  
15 them resworn.

16 Okay. Are there any -- anything further?

17 Okay. Then I believe we're ready to begin with  
18 the additional prefiled testimony. Why don't we take  
19 a short break so everyone can rearrange. Let's say  
20 about five minutes or so.

21 (A recess was taken.)

22 HEARING OFFICER TIPSORD: If we could go back  
23 on the record for just a moment. I understand the  
24 Illinois Petroleum Marketers and the Illinois

1     Petroleum Council have agreed to change the order a  
2     little bit, and Mr. Michael Rapps will be the first  
3     witness with prefiled testimony.

4             I want to take care of some housekeeping things  
5     before we start.

6             Mr. Rapps' testimony was prefiled -- let me get  
7     the date on that -- and received by the Board on  
8     October 28th, 1996. For the record, if there is no  
9     objection, we will admit Mr. Rapps' testimony as  
10    Exhibit Number 8.

11            There any objection to that?

12            Seeing none, we will make that admission then.

13                         (Exhibit Number 8 admitted.)

14            HEARING OFFICER TIPSORD: In addition, Mr.  
15    Rapps has given me, and I believe he's distributed to  
16    everyone in the audience that would like a copy, a  
17    copy of a Stack Unit Map Sangamon County, Illinois,  
18    and we will mark that, if there is no objection, as  
19    Exhibit Number 7.

20            Seeing no objection, we'll mark that as Exhibit  
21    Number 7.

22                         (Exhibit Number 7 admitted.)

23            MR. RIESER: Shouldn't it be Exhibit Number

24    9?

1 HEARING OFFICER TIPSORD: No. I mismarked  
2 things initially. We have Exhibit Number 6 is  
3 actually the Agency forms and then Exhibit Number 7 is  
4 the Stack Map, and then Mr. Rapps' testimony will be  
5 Exhibit Number 8.

6 MR. RIESER: Okay.

7 HEARING OFFICER TIPSORD: And then Mr. Rapps  
8 if we could have you sworn.

9 (Michael W. Rapps was duly sworn.)

10 HEARING OFFICER TIPSORD: Would you like to  
11 give us a short summary of your testimony or would you  
12 like to just answer the questions?

13 MR. RAPPS: Yes, I would. I don't want to  
14 read the testimony into the record. I think it speaks  
15 for itself. I was -- after having filed that  
16 testimony, I received some prefiled questions from the  
17 Agency which I'm here to respond to.

18 But before I do that, I think I should preface my  
19 responses by saying that I've been a part of this  
20 process beginning with House Bill 300, going through  
21 the subsequent rulemaking, and now to the present,  
22 representing as a technical representative IPMA, the  
23 Petroleum Marketers Association. We represent  
24 typically the small mom and pop service station

1 owners, as opposed to the major oil companies.

2 I should tell you, too, that historically going  
3 back several years, House Bill 300 was not something I  
4 particularly cared for, but I understand why it  
5 happened. I think it certainly caused a stir. It was  
6 somewhat draconian when it was adopted, but  
7 nonetheless, the legislature has spoken and it is part  
8 of law so we have to deal with it.

9 Myself personally, come September I will now have  
10 been practicing in this field for 25 years, which  
11 astonishes me. But the first five of those years I  
12 worked at the Agency. I had cause to review permit  
13 applications and make decisions, the kinds of  
14 decisions that come up day to day in which there are  
15 frequently disputes over interpretations of rules and  
16 so forth. For 20 years I've had to deal on the other  
17 side of the issue representing people in industry. So  
18 I understand how these matters can grow into disputes.

19 I should say, too, that the IPMA through my  
20 testimony actually had darn few comments. We feel  
21 that the last proceeding we virtually moved a  
22 mountain. Philosophies changed for the better, we  
23 think. We were not prepared to quibble over a great  
24 deal of details. We've only flagged two issues that

1 -- one of which caught my attention as a practicing  
2 engineer. The other caught my attention on behalf of  
3 the IPMA and certain practical problems that might  
4 arise from it.

5 Those two issues are, one, stratigraphic unit. I  
6 believe that, as I've stated in my testimony, that the  
7 definition of stratigraphic unit as proposed by the  
8 Agency will in my opinion lead to a number of disputes  
9 because it's so highly subjective.

10 Second, the issue of opening -- reopening NFA  
11 sites due to the presence of evidence of  
12 contamination, however that might play out, causes the  
13 Petroleum Marketers some problems insofar as some  
14 members have NFA sites based on Method One and the  
15 Berg Circular. What has happened with many of these  
16 sites is that they have been transferred to other  
17 property owners, and as far as anybody knows, these  
18 are clean sites. Now to reopen those issues while  
19 these properties are in commerce will cause terrible  
20 difficulties, I believe, to the IPMA members.

21 Now, I believe I just mentioned that House Bill  
22 300 is not something I was really fond of. For the  
23 most part, my firm does not recommend to people that  
24 they seek No Further Action sites through the Berg

1 Circular. But we have on occasion done that. My  
2 impression is that when people then go back to examine  
3 sites with Phase 1s, Phase 2s, they're going to find  
4 contamination probably on these sites. But that was  
5 not what House Bill 300 was intended to deal with.  
6 House Bill 300 dealt with the notion that there were  
7 some properties that just didn't pose a risk to  
8 anybody. Whether we like the method or not, that's  
9 what it did.

10 Now, if I can respond to the questions, I think it  
11 may -- it might be better if I respond to -- there  
12 were two questions raised to me -- three questions.  
13 It might be better if I respond to them one at a time  
14 before having any cross. I'm just suggesting that.

15 HEARING OFFICER TIPSORD: Mr. Rapps, what  
16 we'll have is we'll have Kim Robinson read the  
17 question in the record and I allow to you respond to  
18 it.

19 MR. RAPPS: Okay, terrific.

20 HEARING OFFICER TIPSORD: That will keep the  
21 record smooth.

22 MS. ROBINSON: Number one is: "With regard  
23 to Mr. Rapps' testimony on a proposed change to the  
24 definition of stratigraphic unit and related changes

1 to sections of the rules that use that term, the  
2 Agency is concerned that the proposed changes would  
3 result in more subjective judgment calls by  
4 consultants and Agency staff."

5 The first subpart of that question is: "Under Mr.  
6 Rapps' definition, who is to determine which  
7 stratigraphic unit at the site exhibits physical  
8 features that are most conducive to migration of  
9 contaminants?"

10 MR. RAPPS: I believe that the person who's  
11 conducting the investigation must make that judgment.  
12 I believe it's a professional judgment, as people in  
13 my line of work and people in your line of work are  
14 often called to do. I think that professionals are in  
15 this State licensed, and the public can take some  
16 security from that fact, just as members of the Bar  
17 are admitted to the Bar. It affords a level of  
18 protection to the public. At some point professional  
19 judgments are made and I believe that were you to pose  
20 this question in a referendum to the public at large,  
21 they would say yes, a professional should be allowed  
22 to make professional judgments. It's really that  
23 simple.

24 And I understand that there frequently come up



1 questions as to professional judgment that maybe the  
2 Agency doesn't agree with the judgments made by some  
3 people or other. But if there is fraud or anything of  
4 that sort, there is a mechanism by which the Agency  
5 can go to the State and file a complaint.

6 So I believe that to answer your question, to  
7 reaffirm, professional judgment must be relied upon by  
8 the person who does this work in the field. I think  
9 the person in the field is in a much better position  
10 to make those judgments than a person reading a log in  
11 an office.

12 MS. ROBINSON: By professional do you mean a  
13 Licensed Professional Engineer registered in the State  
14 of Illinois?

15 MR. RAPPS: The LPE must ultimately certify  
16 his work. Now, he may have geologists who he relies  
17 upon or other staff, but he has to take responsibility  
18 for their work. So I do mean that.

19 Let me add that we now will have geologists  
20 registration. The regulations have not been  
21 promulgated yet, but when that happens, the geologists  
22 will also have the same sort of authority that  
23 engineers do.

24 MS. ROBINSON: Okay. The second subpart to

1 my first question is: "What criteria should be used  
2 to make that determination?"

3 MR. RAPPS: I think I've already answered  
4 that. I think it is a professional judgment that  
5 people who are trained professionals can make and must  
6 make.

7 MS. ROBINSON: As a follow-up then, how can a  
8 person determine which unit is most permeable by, say  
9 for instance, a field observation, which I think you  
10 referenced in your testimony?

11 MR. RAPPS: Well, I believe that sand seams,  
12 for example, are something one can physically notice  
13 and observe in the field, breaks, fractures, that type  
14 of thing. But it's a field judgment.

15 MS. ROBINSON: The third subpart to my first  
16 question is: "If the Agency does not agree with the  
17 location in which the sample or samples was or were  
18 collected for geotechnical testing, what is the next  
19 step?"

20 And then I have a for instance. "In the event  
21 that the Agency agrees with the units that were logged  
22 but does not think that the appropriate zone or zones  
23 were sampled (based on permeability), what happens?"

24 MR. RAPPS: Well, I suppose that the Agency

1 could reject the consultant's submittal, and I suppose  
2 then also if it were a matter of dispute, it could be  
3 taken to the Board.

4 MS. ROBINSON: As a follow-up to that, in the  
5 instance where a boring log indicates one type of  
6 geologic material but the results of the particle size  
7 analysis indicate that the type of material identified  
8 in the field boring log is inaccurate, then what do  
9 you suggest?

10 MR. RAPPS: How -- well, tell me how it would  
11 be inaccurate.

12 MS. ROBINSON: Can you give an example?

13 MR. CLAY: For example -- Doug Clay -- if the  
14 person in the field characterizes a specific zone as a  
15 -- maybe a silty clay, but when doing the particle  
16 size analysis and the classification of that zone,  
17 it's not a silty clay, it's a clayey silt, or whatever  
18 the appropriate classification is -- and the Agency  
19 sees that quite frequently -- what would be the --  
20 your response in that case?

21 MR. RAPPS: Well, I think that when we get  
22 into question 2 it will be -- I think my response will  
23 be a little bit better. We haven't dealt with that  
24 yet.

1           But let's take a stratigraphic unit as I define  
2 it. Let's say a till unit, part of the Glasford  
3 Formation. The Vandalia Till is the most common one  
4 around this area. Probably this building is built on  
5 top of it. The Vandalia Till has striations of sand.  
6 It's, in fact, known as a sandy till, but it's a till  
7 nonetheless, and the Berg Circular is based on the  
8 fact that it's a till, not that it might have a sandy  
9 striation or two in it.

10           So it depends upon whether you're going to look  
11 under a microscope at these properties or if you're  
12 going to take the bigger picture, which I believe is  
13 what Berg has done and which House Bill 300 has done.

14           MR. CLAY: Mr. Rapps, in the till as you  
15 described it would it not be uncommon that there would  
16 be, for instance, sand seams or more permeable seams  
17 that would be -- that would conduct contaminant  
18 migration?

19           MR. RAPPS: Yes, yes. The till unit I just  
20 mentioned is known for that.

21           MR. CLAY: Okay. And in those cases where  
22 would you propose that the physical -- the sample for  
23 the physical soil testing be taken?

24           MR. RAPPS: Well, I -- going back to the

1 first part of the question on professional judgment, I  
2 believe the sandy zones is what the Agency is  
3 interested in. Now, that -- I should comment, too,  
4 that that might not have anything to do with what's  
5 happening in reality, because when you're dealing with  
6 massive units that have small imperfections, the  
7 massive unit is really dictating what's happening in  
8 the field. Although the small imperfections may be  
9 subject for academic study, but they really have  
10 nothing to do with the larger -- larger scheme of  
11 things.

12 I'm not sure if I've answered that properly but --

13 MR. CLAY: Mr. Rapps, even on a small scale,  
14 though, I mean that small sand seam, even though over  
15 a large geologic -- large geographical area it may be  
16 small, it could provide a migration pathway off site,  
17 certainly.

18 MR. RAPPS: That's true. I think that's  
19 true, sure. But what you find -- and this goes back  
20 to stratigraphy that we're going to talk about next.  
21 Sand seams that you find in these till units are  
22 generally pretty limited. If they're extensive,  
23 areally extensive, they generally have a name.

24 MR. CLAY: One more question. Mr. Rapps, you

1 said that, you know, you as a professional engineer  
2 would tend to sample the sand seam since that is  
3 really what we're concerned with and being the most  
4 potential for contaminant migration. But another  
5 professional in your field could also make an argument  
6 that he's going to -- he or she is going to sample a  
7 unit that they consider most representative of the  
8 whole till material which may not include that sand  
9 seam, isn't that correct?

10 MR. RAPPS: I think that's true. I'm not to  
11 say which is better or worse. For the till unit I was  
12 talking about that probably even makes more sense.  
13 But if you're simply dealing with little sand  
14 striations that don't amount to anything, why sample  
15 them. But I understand what -- the Agency's concern,  
16 and I think that's why we had suggested putting in  
17 language that the most permeable unit be sampled,  
18 because we thought that's what the Agency was really  
19 getting at.

20 MS. ROBINSON: Question number 2: "How does  
21 the definition of stratigraphic unit as proposed by  
22 Mr. Rapps correlate with the Berg classification  
23 determination in Circular 532?"

24 MR. RAPPS: Exhibit Number 7, which I think

1 you have one, Kim, and I think the Board Members have  
2 one, I think will illustrate how this is done. This  
3 is -- what you're seeing on page number 1 -- I've  
4 numbered these on the exhibit -- the stack unit map  
5 identifies the map subsurface to a depth of 15 meters  
6 put together by Mr. John Kempton and company at the  
7 State Geological Survey. The legend for that is on  
8 page number 2.

9 Page number 3 is the Berg Circular in effect. And  
10 if you lay page number 3 against page number 2, you  
11 will find that there is a basis by which Berg has  
12 given the classifications G, F, and E, which are the  
13 No Further Action zones, and they correlate to known  
14 strata, and the key for those strata are given.

15 The reference also given in the stack unit maps,  
16 and which we've proposed in our definition, is the  
17 Handbook of Illinois Stratigraphy, Bulletin Number 95,  
18 dated 1975, from the Illinois State Geological Survey,  
19 in which all strata in this State have a name.

20 MS. ROBINSON: Is there a more current  
21 version of that out, do you know?

22 MR. RAPPS: No, there is not.

23 And to take this a little farther, the Berg  
24 Circular Potential for Contamination of Shallow

1 Aquifers in Illinois was published in 1984. The stack  
2 unit map that you're looking at wasn't published until  
3 1988. And the publication was Stack Unit Mapping of  
4 Geological Materials in Illinois to a Depth of 15  
5 Meters, and that's Circular 542. But actually,  
6 Kempton and others at the Survey were working on this  
7 as long ago as October 1981 when they published  
8 Environmental Geology Note 100, Three Dimensional  
9 Geologic Mapping for Environmental Studies in  
10 Illinois. These all tie together. And the Berg  
11 Circular map, which we're talking about how one goes  
12 about verifying it, correlates directly to the stack  
13 unit map. And in my opinion if you can verify that  
14 the materials that Berg thought were present when he  
15 mapped out the stack unit map and the pollution  
16 potential map, you can correlate quite well and you  
17 should be able to certify on that basis alone.

18 MR. CLAY: Mr. Rapps, when Mr. -- Dr. Berg --  
19 is it Dr. Berg?

20 MR. RAPPS: Dr. Berg.

21 MR. CLAY: Put this map together, was it  
22 intended to be used for leaking underground storage  
23 tank sites?

24 MR. RAPPS: Oh, of course not. It was



1 adopted by the legislature for those purposes.

2 MR. CLAY: Okay. And are you -- I believe  
3 that Dr. Berg also stated that verification of his map  
4 on a site-specific basis is necessary. Are you  
5 familiar with something to that --

6 MR. RAPPS: I haven't read the entirety of  
7 that, but he did discuss that in some testimony given  
8 in a Board proceeding. I'm not sure which one that  
9 was off the top of my head.

10 MS. ROBINSON: Mr. Clay, are you making  
11 reference to Exhibit Number 2, which is a letter to  
12 Chairman Manning at the Pollution Control Board from  
13 Dr. Berg?

14 MR. CLAY: I believe it was in that letter.

15 MR. RAPPS: I haven't seen that letter.

16 HEARING OFFICER TIPSORD: For the record, I  
17 believe that was also a previous public comment in the  
18 first underground storage tank proceeding 94-2, I  
19 believe it was.

20 MR. RAPPS: I should comment I'm familiar  
21 with Dr. Berg's feeling about having his map used for  
22 these purposes. He's not particularly delighted by  
23 that.

24 MS. ROBINSON: Question number 3 then, we'll

1 go on. "The use of the definition as proposed by Mr.  
2 Rapps does not appear to evaluate the variability  
3 within the geologic material located at a site. Isn't  
4 it important to evaluate the variability within the  
5 geologic material in order to determine if there is a  
6 potential for transportation of contaminants?"

7 MR. RAPPS: I think that I probably already  
8 answered that a few minutes ago talking about sand  
9 seams, and I think that does appear to be the issue.

10 MS. ROBINSON: I have nothing further.

11 Mr. Clay or Mr. King, do you have anything to add?

12 MR. KING: Mike, I guess I'm a little -- I  
13 saw some -- your proposed language changes there.  
14 Could you maybe just summarize what you're -- how  
15 you're thinking things need to be redone from what we  
16 had proposed?

17 MR. RAPPS: I think that, Gary, what we were  
18 saying here is that the definition of stratigraphic  
19 unit as proposed is really in the eye of the beholder.  
20 And for purposes of classifying strata, it's already  
21 been done for the most part. Units have names. Their  
22 properties have been described. There is a large body  
23 of scientific research in this area.

24 This is publication number -- Bulletin Number 95

1 is just a remarkable publication, the depth of detail  
2 that it goes into. There's a lot of supporting in the  
3 Survey that backs this up. We think that the question  
4 of stratigraphic unit has really already been answered  
5 by the scientists over at the Survey.

6 And what really concerns me more than anything is  
7 that we have petty disputes over you should have  
8 sampled this, you should have sampled that. You can  
9 do that -- you can get into those on just about any  
10 part of the regs, but I think stratigraphic unit in  
11 particular just opens the barn door to an awful lot of  
12 unnecessary expenditure of energy.

13 MR. KING: I would agree that we shouldn't be  
14 spending energy on unnecessary issues. One of the  
15 things we were trying to do was to close that gap in  
16 terms of making decisions -- assuring that decisions  
17 were based on objective evidence. Do you concur that  
18 it should be based on wherever possible you make  
19 decisions on objective evidence as opposed to just  
20 opinion?

21 MR. RAPPS: Yes, Gary. In practice we have  
22 to wrestle with these issues all the time when we go  
23 out in the field and we -- obviously, the world is not  
24 as perfect as some of these maps suggest. We go out

1 in the field all the time and have to make certain  
2 judgments as to whether we're dealing with pathways or  
3 nonpathways and that sort of thing.

4 But I guess my feeling is that somebody has to  
5 make that judgment and I would like to leave it in the  
6 hands of the professionals who are out in the field  
7 doing the work. And we have a code of ethics, just  
8 like lawyers have a code of ethics. And I like to  
9 think the best of people, not the worst. I'm sure  
10 there's some bad apples out there who are going to,  
11 you know, bend the rules. But I don't think you can  
12 go into this believing that that's the way it  
13 operates, because I don't think it does.

14 MR. KING: To me then it leaves you in a  
15 situation where if you've got -- where you have a  
16 dispute where the dispute then becomes one simply of  
17 opinions where it's the opinion of the person in the  
18 field versus the Agency person, and they may have  
19 equally good credentials, they may have equally good  
20 reasons for making the decision that they do, but it  
21 comes down to issues of opinion. Isn't it better to  
22 find a way to resolve those issues through objective  
23 evidence rather than just disputes based on opinions?

24 MR. RAPPS: Well, I think that's a perfect

1 world. But just like in medical cases, there are  
2 always professional opinions disputes that arise among  
3 professionals. My guess is if there is going to be a  
4 dispute from the Agency's perspective, they ought to  
5 have a pretty darn good reason for disputing a  
6 classification or whatever made by a licensed  
7 professional.

8 MR. KING: But if you had two doctors that  
9 were disputing the extent of something in the blood  
10 stream, you wouldn't want a decision based on just  
11 their opinions. Wouldn't you want some kind of  
12 analysis, some objective evidence related to what was  
13 there?

14 MR. RAPPS: Well, yes. And I probably  
15 shouldn't have brought up that example because that's  
16 not in the field I work in. But, generally, there is  
17 evidence to support opinions on both sides in cases  
18 like that and at some point someone has to make a  
19 judgment. I believe that would be the role of the  
20 Pollution Control Board.

21 MR. KING: But once again, wouldn't it be  
22 better for the Board in rendering their decision to  
23 have that based on objective evidence relative to  
24 analytical data?

1           MR. RAPPS: Absolutely. Maybe it's possible  
2 to tighten up the description of how one goes about  
3 sampling stratigraphic units. But I guess I just saw  
4 it as the tail wagging the dog by changing  
5 stratigraphic units as a concept to mean anything  
6 anybody wants it to mean when in fact we have a pretty  
7 good Bible here on stratigraphic units in the State.

8           So maybe I -- we don't disagree with what you're  
9 trying to do, Gary, but I think there's probably a  
10 much better way to do it.

11           MR. KING: Do you see the fundamental issue  
12 being the definition of stratigraphic unit or how that  
13 issue is applied in the context of Section 307?

14           MR. RAPPS: I think it's the application of  
15 the concept. I think that the -- the definition  
16 troubles me because I think it's not a good definition  
17 and I think we have a good definition. But how one  
18 goes about sampling the soil -- we really don't  
19 dispute if you want five tests, for that matter. But  
20 let's not change the science to meet our objective.  
21 And I just think there's a much better way to do it  
22 than we have already seen. I wanted the Board to be  
23 aware that we do have some pretty good body of  
24 information on stratigraphic units in the State.

1 HEARING OFFICER TIPSORD: Mr. Rapps, would  
2 you identify again -- when you referred to the Bible  
3 on the definition of stratigraphic unit, would you  
4 identify that again, please?

5 MR. RAPPS: This is the called the Handbook  
6 of Illinois Stratigraphy by H. B. Willman, et al.  
7 It's Bulletin Number 95 from the Illinois Geological  
8 Survey.

9 MR. KING: Does that document contain  
10 narrative language as to what is the scientific  
11 definition of a stratigraphic unit? I mean how would  
12 they decide whether one stratigraphic unit was one way  
13 or another unless they had some kind of definition?

14 MR. RAPPS: Well, they do have definitions,  
15 Gary. Just in the way of example, I'll read this one  
16 because we've already talked about the Vandalia Till,  
17 if I can find it here.

18 It's part of the Glasford Formation. "The  
19 Vandalia Till Member of the Glasford Formation, with  
20 reference to Jacobs and Lineback, 1969, page 12, is  
21 named for Vandalia, Fayette County, and the type  
22 section is in the Vandalia Bridge Section, along the  
23 Kaskaskia River, at Vandalia, in the Northwest corner  
24 of the Northeast corner of the Southeast corner of

1 Section 16, Township 6 North, Range 1 East, where it  
2 is about 20 feet thick. The Member consists of sandy  
3 till with thin lenticular bodies of silt, sand, and  
4 gravel. It is calcareous, except where weathered,  
5 generally gray, and moderately compact. It is bounded  
6 below by the Mulberry Grove, Smithboro, or older beds,  
7 or the top of the Sangamon Soil. It commonly is 25 to  
8 50 feet thick, and it occurs widely in south-central  
9 and central eastern Illinois."

10 That is the level of detail they've gone into  
11 here, but there are supporting documents which I have.  
12 In fact, there's major work called The Pleistocene of  
13 Greater Illinois, which goes into greater detail.

14 MR. KING: Now, what you've read describes a  
15 specific stratigraphic unit, correct?

16 MR. RAPPS: Yes.

17 MR. KING: But that does not define that  
18 term. It doesn't -- that -- what you just read  
19 doesn't say this is what a stratigraphic unit is. I  
20 mean it describes the conditions of one stratigraphic  
21 unit. Do they describe -- you know, because before  
22 you can say this stratigraphic unit is described as  
23 follows, you have to know what you mean by the term  
24 stratigraphic unit.



1           MR. RAPPS: Well, the Vandalia Till is by  
2 definition a stratigraphic unit as used in this  
3 publication. The other -- the companion publication,  
4 the Pleistocene Stratigraphy, that I mentioned has a  
5 great deal of data on grain size analysis of the  
6 Vandalia Till, on plasticity, and so forth. Not just  
7 the Vandalia Till. That's merely an example. All the  
8 materials.

9           MR. KING: So you're not offering a  
10 definition of stratigraphic unit. What you're  
11 offering is a compilation of description of  
12 stratigraphic units?

13           MR. RAPPS: I think that's probably fair to  
14 say that.

15           MS. ROBINSON: Is it possible that any of the  
16 information in that book could have changed since the  
17 date of its publication?

18  
19           MR. RAPPS: I think it's a work in progress  
20 only insofar as it's predicated on all the soil  
21 borings and information that existed at the time of  
22 its writing. I think it's from my own observations  
23 pretty accurate, but there are areas where you find  
24 that it's just not quite accurate. As more borings

1 have become available, I think there are other  
2 publications that may tidy up some of the areas where  
3 there are some questions. But this as a State-owned  
4 document is the best available right now.

5 MS. ROBINSON: Wouldn't it be important based  
6 on the fact that that could have changed some then to  
7 look at everything on a site-specific basis as far as  
8 determining what a stratigraphic unit at a certain  
9 site might be?

10 MR. RAPPS: For verifying this information?  
11 For verifying the Berg Circular? Sure.

12 MS. ROBINSON: For defining what a  
13 stratigraphic unit is.

14 MR. RAPPS: I guess what I'm saying is that  
15 stratigraphic units are already out there and they  
16 have a name. It's their thickness and extent, so  
17 forth, that should be the question as opposed to a  
18 sand seam within the Vandalia Till that by definition  
19 the Vandalia Till already has sand seams. It says  
20 that. I don't view that sand seam as a stratigraphic  
21 unit.

22 MR. KING: If we could go back -- I want to  
23 go back to the definition that we had of stratigraphic  
24 unit. Mike, are you disagreeing that that's an

1   inaccurate scientific description or is it your --  
2   you're disagreeing with the application of how we're  
3   using that definition?

4           MR. RAPPS:  I think it's a poor scientific  
5   definition, but my dispute is really more on what it  
6   would mean in application.  What I would suggest is  
7   rather than going with a definition that -- the  
8   definition that you have for stratigraphic unit, that  
9   you use a real nice good scientific definition, but  
10  then deal with how you want that applied, how many  
11  tests and so forth you want done on that stratigraphic  
12  unit, why you do it, when you do it, and so forth.

13          MR. KING:  I guess what's bothering me is I'm  
14  having trouble figuring out where the definition of  
15  stratigraphic unit is in the document you're reading.  
16  I mean if it's just a compilation of descriptions, how  
17  do they start -- how do they start off by saying what  
18  is a -- what describes that type of thing?

19          MR. RAPPS:  Gary, these relate to time  
20  periods and the methods of deposition.  For example,  
21  LUST or windblown deposits, there are alluvial soils  
22  described here which are water lane deposits.  There  
23  are terrace deposits, the Henry Formation, which is  
24  laid by another type of water action.  You have

1 glacial tills. You have some windblown soils which  
2 exist interlaced with the various tills which are  
3 defined by age, the Wisconsin Age, the Illinoisan Age,  
4 Kansan Age. That's how you make definitions of  
5 materials, even though you don't readily observe a  
6 break, are thousands of years younger or older than  
7 others, and that's how they're defined in geologic  
8 terms. But these materials have properties. They've  
9 been studied. They have names.

10 Not everyone, I will readily admit -- it's unusual  
11 as an engineer that I know about this because most  
12 engineers don't deal with this kind of thing, but  
13 geologists tend to know what we're talking about here.

14 MR. KING: Well, we describe it as --  
15 stratigraphic unit as being a site-specific geologic  
16 unit of native deposited material and/or bedrock of  
17 varying thickness, and give some examples. I guess  
18 I'm wondering what troubles you as far as just a  
19 definitional use of the words.

20 MR. RAPPS: By that definition the -- again,  
21 focusing on Vandalia Till, one segment of Vandalia  
22 Till 25 foot thick might by your definition have five  
23 stratigraphic units or six or seven or whatever. I  
24 don't think that -- you're looking at -- you're

1 focusing, I think, in the Agency on physical  
2 properties of material within the strata as opposed to  
3 the strata itself. I just would like to get to a good  
4 sound definition.

5 And whether you take a sample of every sand seam  
6 you find within the Vandalia Till or not, that doesn't  
7 bother me. But I don't want to run into disputes  
8 because the soil's identified as going from gray black  
9 or gray brown to brown gray and having someone at the  
10 Agency say, well, that's obviously another  
11 stratigraphic unit. I think it's very subjective the  
12 way it's been laid out, and I don't think it's going  
13 to help the Agency or the regulated community at all.

14 MR. CLAY: Are you saying that there isn't a  
15 problem with the number of samples being required? I  
16 mean, for instance, if there are seven changes in  
17 material within the Vandalia Till, it's not a problem  
18 having seven samples in that Vandalia Till. It's the  
19 fact that we characterize that as seven stratigraphic  
20 units?

21 MR. RAPPS: Well, I think that that's what  
22 troubles me. The question of whether it's seven or  
23 ten or fifteen is still subjective when you're talking  
24 about little striations and little changes of color

1 and so forth. I think that that could just lead to  
2 numerous disputes over what's a stratigraphic unit,  
3 how many samples should you take of that unit, and so  
4 forth.

5 Maybe if this can be clarified as to why you  
6 wanted that done with some -- maybe expand the  
7 language a bit, that would be helpful. I don't think  
8 that we are challenging the Agency's notion that there  
9 should be some sampling done. We're not. But we  
10 don't want to get into disputes.

11 As a consultant I run into this all the time and,  
12 gee, you're always called into question why did you do  
13 this, why did you do that. I don't think that's  
14 necessary.

15 MR. KING: Are you suggesting that maybe  
16 we're using the wrong term as stratigraphic unit?  
17 That it should be stratigraphic strata?

18 MR. RAPPS: No. I'm suggesting that the term  
19 stratigraphic unit is already defined by science, and  
20 that in this State every stratigraphic unit has a  
21 name, and there are definitions and descriptions of  
22 these stratigraphic units. The question is how do you  
23 want those stratigraphic units tested. It's really  
24 that simple.

1 MS. ROBINSON: We have nothing further.

2 HEARING OFFICER TIPSORD: Mr. Rieser.

3 MR. RIESER: Yeah. Going back to your  
4 initial statement about the importance of professional  
5 judgment, I just want to confirm something for the  
6 Board. Doesn't the evaluation of pathways -- isn't  
7 that in the judgment of the Professional Engineer  
8 certifying the site which the Agency can only -- which  
9 is presumed to be correct and the Agency can only  
10 dispute based on their own objective evidence to the  
11 contrary?

12 MR. RAPPS: It is. And it's also for the  
13 record probably the toughest call that you make in the  
14 field.

15 MR. RIESER: So you're talking about giving  
16 this determination the same type of deference, if you  
17 will, that's given to the generalized pathway  
18 evaluation?

19 MR. RAPPS: With respect to professional  
20 judgment, yes.

21 MR. RIESER: Were you here for the testimony  
22 earlier this morning presented by the Agency?

23 MR. RAPPS: I believe I heard most, if not  
24 all, of it.

1           MR. RIESER:  There was a discussion about --  
2   and it's come up in some of the questions about the --  
3   how you make determinations and how you make these  
4   types of decisions while you are logging a sample.  
5   Could you go through for the Board what types of  
6   observations are typically made, both visual and  
7   tactile, while logging a soil sample?

8           MR. RAPPS:  Well, a number of things.  I  
9   don't do a lot of that myself.  Typically geologists  
10  from our company do.  But there are -- we use pocket  
11  penetrometers, for example.  They measure the  
12  unconfined compressive strength.  That's actually an  
13  engineer's tool.  You examine, physically look at the  
14  soil and typically rub some in your fingers to see if  
15  there's some sandy materials there or if it's highly  
16  plastic, things of that sort.  There's some  
17  guidebooks.  ASTM has some methods that they use to  
18  judge -- define colors of soils and texture and so  
19  forth.  You do all of those things taken in concert  
20  and using this guidebook typically -- we have a number  
21  of these guidebooks floating around our office.  They  
22  all have mud all over them because people take them  
23  out in the field and use them to look up soil terms to  
24  see what you're dealing with.



1           MR. RIESER: The Agency currently requires  
2 people to use the Unified Soil Classification System  
3 while doing the logs, is that correct, doing the  
4 boring logs and identifying the soil types in the  
5 logs?

6           MR. RAPPS: You know, I'm not certain. I  
7 think that that is certainly one that is commonly  
8 used. That's really more of an engineering system  
9 that does not relate necessarily to what the guidebook  
10 I was talking about. We do it both ways.

11          MR. RIESER: That would be 308(a)(2)(C).  
12 With that soil classification you're able to identify  
13 the types of soil that would tie into the text that  
14 you're referencing here?

15          MR. RAPPS: Actually, the Unified System  
16 doesn't do you a great deal of good with this type of  
17 classification based on particle size and other  
18 matters, plasticity index, and so forth. You can  
19 classify soils as CL, CH, silty clays, clay silts, and  
20 that sort of thing, which is really an engineering --  
21 that's an engineering terminology for purposes of  
22 structures and building and so forth. The geologic  
23 units that I reference in Bulletin 95 are really  
24 different. You can't really tie the two together.

1 Other than to say that typically Vandalia Till is  
2 typically a sandy clay.

3 MR. RIESER: Turning back to the Unified Soil  
4 Classification instrument, it does allow you to make  
5 certain types of classifications regarding the soil  
6 which are then entered in the log which are reviewed  
7 by the Agency?

8 MR. RAPPS: Yes.

9 MR. RIESER: And then you can -- based on  
10 those types of soils and all of those visual and  
11 tactile observations, you can make some decisions  
12 regarding the ability of that material to transport  
13 contaminants?

14 MR. RAPPS: Yes. That's found in most  
15 standard textbooks and reference books.

16 MR. RIESER: Let me ask you one other  
17 question, slightly apart from what we've been talking  
18 about. And this is to the issue of yield.

19 You were here when Mr. Clay identified certain  
20 types of analyses that could be used for calculating  
21 yield from hydraulic conductivity, is that correct?

22 MR. RAPPS: Yes.

23 MR. RIESER: Can any of those tests be used  
24 for nonsaturated soils?

1 HEARING OFFICER TIPSORD: Could you speak up,  
2 Mr. Rieser? We're losing you.

3 MR. RIESER: Can any of those tests be used  
4 for nonsaturated soils?

5 MR. RAPPS: No. They're saturated zone  
6 tests.

7 MR. RIESER: Thank you. I have nothing  
8 further.

9 MR. RAO: You want to go first?

10 MR. KING: Well, I wanted to follow up on an  
11 issue other than the stratigraphic unit issue.

12 MR. RAO: Okay. Then maybe I will go first.

13 Mr. Rapps, in response to Mr. King's question you  
14 said that the issue here is not about how you -- you  
15 know, the definition of stratigraphic unit, and it's  
16 an issue of how you go about testing the geologic  
17 material. So, you know, from what you have proposed  
18 here as a definition for stratigraphic unit, how would  
19 you characterize the stratigraphic unit? What kind of  
20 testing would you do? Would you just look at the  
21 manual there and say, you know, if it's Vandalia Till,  
22 you just say it is whatever the manual says is what it  
23 is or --

24 MR. RAPPS: Well, that's typically what you

1 would do. You don't need to do a great deal of  
2 physical testing on soils to identify them in the  
3 field as to what they are versus, you know, the LUST,  
4 for example versus some -- a buried paleosol, the  
5 Sangamon Soil, and maybe a till unit. You can do  
6 those classifications without doing engineering tests  
7 in most cases.

8 But the question I think that -- I could map this  
9 site just using boring logs without doing any tests,  
10 this property right now, and tell you what the  
11 thickness of the various -- and be reasonably  
12 accurate. But that doesn't go to the Agency's concern  
13 about which materials are most conducive and would  
14 allow pathways to exist. That could be -- it's highly  
15 variable within any given soil sample or any column of  
16 soil that you see. I guess I don't know how many  
17 tests should be done, if there should be any tests,  
18 for that matter. We're not objecting to that. We  
19 just think we would like to stick with the science on  
20 the stratigraphic unit part, then we don't have more  
21 stratigraphic units than we need to have.

22 MR. RAO: So are you saying that, you know,  
23 the maps in that manual are -- let me see -- how  
24 accurate are they? For example, the Berg Circular, it

1 had a caveat in it which said it should not be used  
2 for site-specific characterization. So are there any,  
3 you know, conditions under which how these maps could  
4 be applied for characterizing a LUST site?

5 MR. RAPPS: Well, that goes back to House  
6 Bill 300 and whether the Berg Circular was ever a good  
7 idea for these purposes.

8 MR. RAO: I know. I want to know -- I'm  
9 sorry for interrupting.

10 MR. RAPPS: Maybe to get back to your  
11 question. I think you could put a soil boring down  
12 and tell if you have the soils that Berg mapped or not  
13 have them. We do that all the time. I think that in  
14 practice I've found it to be pretty accurate because  
15 it's based on literally thousands of soil borings  
16 throughout the State. But there are anomalies  
17 certainly and I mean I've run into those before. The  
18 only way you can verify is to put a hole down.

19 MR. RAO: That's where the professional  
20 judgment comes?

21 MR. RAPPS: I think so.

22 MR. RAO: Okay. Would it be possible for you  
23 to provide the Board with a copy of the manual that  
24 you are talking about this, this --

1 MR. RAPPS: Sure.

2 MR. RAO: I don't know what the title of that  
3 manual is but --

4 MR. RAPPS: The Handbook of Illinois  
5 Stratigraphy?

6 MR. RAO: Yeah.

7 MR. RAPPS: Sure, sure.

8 MS. ROBINSON: Would it be possible for you  
9 also to provide the Agency with a copy? I don't  
10 believe we have a copy of that, either.

11 MR. RAPPS: Yes. They're three seventy-five  
12 from the Geological Survey.

13 HEARING OFFICER TIPSORD: Mr. King, did you  
14 have something additional?

15 MR. KING: Yeah.

16 Mike, this is just a comment on -- follow-up on  
17 your comment about the reopener of NFA sites where  
18 relative to groundwater investigations, I think you  
19 made a comment you thought that was a bad idea.

20 MR. RAPPS: Well, it scares us, Gary. If a  
21 property is transferred, particularly if they're old  
22 service stations, normally there's a Phase 1 or Phase  
23 2 investigation performed. Typically, the Phase 1  
24 reveals that, gee, it used to be a service station.

1 If the consultant is paying attention, he goes out and  
2 puts some soil borings down, he maybe puts some  
3 monitoring wells in, and very often he's going to find  
4 something out there, some evidence that that used to  
5 be a service station. Now, in cases where he finds  
6 that but we have an NFA letter, I guess the NFA should  
7 certainly mean something, but if they can be reopened  
8 all the time, there's never any closure on these  
9 properties, and you're basically taking them out of  
10 commerce. That's what scares the membership of IPMA.

11 MR. KING: Were you aware that the statute  
12 was amended from the House Bill 300 version to specify  
13 that the Board was to adopt rules setting forth  
14 criteria under which the Agency may require  
15 groundwater investigations where it was otherwise an  
16 NFA geology?

17 MR. RAPPS: I guess I hadn't considered that,  
18 Gary.

19 MR. KING: That was all the questions I had.

20 HEARING OFFICER TIPSORD: Okay. Mr. Rapps,  
21 what I would like to do, if there is no objection, is  
22 reserve Exhibit Number 9 for the Handbook of Illinois  
23 Stratigraphy. And that way then if there is anyone  
24 else who would like to see it, the Board will have it

1 as an exhibit to the proceeding.

2 Is there any objection to that?

3 Seeing none, I'll reserve Exhibit Number 9, and  
4 when you provide us with a copy, it will be so marked  
5 and entered into the Board's record.

6 (Exhibit Number 9 admitted.)

7 MR. RAPPS: Okay, thank you.

8 HEARING OFFICER TIPSORD: Are there any other  
9 questions for Mr. Rapps?

10 Thank you very --

11 DR. GIRARD: I have a question. I'm still  
12 trying to understand the difference in the definition  
13 of stratigraphic unit between Mr. Rapps and the  
14 Agency. It seems to me -- let me see if I've got  
15 this. Mr. Rapps, your main point is that a  
16 stratigraphic unit is a regional area of geology which  
17 includes a whole block descending down into the earth,  
18 and if you come across a different kind of material  
19 running through that stratigraphic unit, you would  
20 call it an anomaly. Is that correct? So if you come  
21 up -- if you're in the middle of one of these zones  
22 and 20 feet down you come upon a one-foot thick seam  
23 of sand that should not be there based on the  
24 definition from your 1975 study, that would be an



1 anomaly, is that correct?

2 MR. RAPPS: Well, I may have misused that  
3 term. In many cases the one-foot thick sand seam that  
4 might exist in the Vandalia Till, I keep using as an  
5 example, is not necessarily an anomaly. The  
6 description defines it as being a massive unit that  
7 has certain sand seams and lenses. That's typical of  
8 almost all the soils in the State. They are not  
9 homogeneous materials, none of them. They're  
10 heterogeneous materials. Just as we have sandy zones  
11 along the river banks, they occasionally have clay  
12 beds within them. So you can't just make the  
13 statement that it's one material.

14 What the Handbook of Illinois Stratigraphy does  
15 break down these materials as to their origins and  
16 their typical properties, where they came from, and so  
17 forth.

18 When we deal with the Unified System, which is a  
19 set of engineering tests on grain size and so forth, a  
20 material from the Banner Formation that came in  
21 300,000 years ago could test as a silty clay just as  
22 one from the Illinoisan system which came in 100,000  
23 years ago. It would still be the same in terms of  
24 engineering properties, but they have names because of

1 how they got there and when they got there.

2 DR. GIRARD: Okay, thank you.

3 MR. RIESER: I'm sorry, I would just like to  
4 follow up with one issue.

5 Back to Board Member Girard's question, if this  
6 sand seam is identified, it would still be your  
7 recommendation that it be evaluated as most likely the  
8 most permeable strata identified in the zone. Isn't  
9 that correct?

10 MR. RAPPS: Oh, absolutely. Sure.

11 MR. RIESER: So your issue is with the  
12 definition of stratigraphic unit as proposed by the  
13 Agency going beyond what's been mapped by professional  
14 geologists through all of their efforts in the book  
15 that you're presenting as Exhibit 9. Is that correct?

16 MR. RAPPS: That's correct.

17 MR. RIESER: And you don't want to get into  
18 discussions with the Agency about what's a unit and  
19 what's not a unit because that decision has already  
20 been made by the geologists that have prepared that  
21 document?

22 MR. RAPPS: Correct. I'm sure there will be  
23 updates at some point in time, and I think they're  
24 long overdue right now.

1           MR. RIESER: But you're still acknowledging,  
2 I think you said numerous times, that based on field  
3 observation and professional judgment of the people  
4 doing the work you should still identify those most  
5 permeable -- I'm sorry, the units most conducive to  
6 contaminant transport and that those should be sampled  
7 to identify their properties?

8           MR. RAPPS: Yes.

9           MR. RIESER: Thank you.

10          HEARING OFFICER TIPSORD: Anything further?

11          DR. GIRARD: Well, I have a question about  
12 professional judgment. Is there a standard reference  
13 manual of methods that this professional would use for  
14 making those kinds of judgments?

15          MR. RAPPS: There are some ASTM test methods.  
16 I think some are already referenced in the rules.  
17 There may be some others that are helpful which tell  
18 you how do you make a judgment on color, how do you  
19 make a judgment on texture. Those are helpful in  
20 making classifications. But beyond that, I think  
21 people who practice in the field understand when  
22 they're out in the field what they're dealing with. I  
23 don't know how else to put it. Some professionals,  
24 I'm sure, are better than others, maybe don't

1 necessarily make great professional judgments, but  
2 they do make judgments.

3 DR. GIRARD: Thank you.

4 When the Board is reviewing an appeal of an Agency  
5 decision, the Board will still need a list of the  
6 objective evidence and the criteria that went into  
7 making that professional judgment, and so it certainly  
8 is helpful to refer specifically to those ASTM  
9 documents if we can and what other elements go into  
10 professional judgment.

11 MR. RAPPS: I think so. Perhaps I can take a  
12 second look at this and maybe round up a few documents  
13 that would be helpful to the Board and pass them along  
14 in comment.

15 DR. GIRARD: Thank you. That would be very  
16 helpful.

17 HEARING OFFICER TIPSORD: Thank you, Mr.  
18 Rapps.

19 At this time were we going to proceed with Mr.  
20 Fleischli or Mr. Gates?

21 MR. RIESER: I don't believe Mr. Fleischli is  
22 testifying other than he submitted a letter which  
23 included Mr. Rapps' testimony.

24 MR. RAPPS: He has no plans to testify.

1 HEARING OFFICER TIPSORD: All right. We will  
2 enter his letter then as a public comment rather than  
3 prefiled testimony.

4 MR. RAPPS: Okay.

5 HEARING OFFICER TIPSORD: At this time then  
6 we'll begin with Mr. Gates. Mr. Rieser and Mr. Gates.

7 (Peter D. Gates was duly sworn.)

8 MR. RIESER: The Illinois Petroleum Council  
9 had prefiled presubmitted testimony which should  
10 probably be taken as an exhibit, which I believe would  
11 be Exhibit Number 10.

12 HEARING OFFICER TIPSORD: Is there any  
13 objection to admitting Mr. Gates' testimony as Exhibit  
14 Number 10?

15 Seeing none, we'll admit that as Exhibit Number  
16 10.

17 (Exhibit Number 10 admitted.)

18 MR. RIESER: Mr. Gates has a modified version  
19 of that which he will go through here today based on  
20 the two hearings that have been held and the  
21 information that's come to the Board to date.

22 MR. GATES: My name is Peter D. Gates and I'm  
23 a field engineer for the Mobil Oil Corporation  
24 responsible for UST remediation in Illinois. I am

1 summarizing my prefiled testimony on behalf of the  
2 Illinois Petroleum Council, or IPC.

3 The IPC is a trade association representing the  
4 owners and operators of a large percentage of the  
5 underground storage tanks in Illinois, including Amoco  
6 Corporation, Marathon Oil, Mobil Oil Corporation, and  
7 Shell Oil Products Company.

8 We have been closely involved in the development  
9 of the UST rules in the State over the last three  
10 years and presented extensive testimony in the R94-2  
11 Docket B proceeding. We met with the Agency and  
12 commented extensively on their proposal which became  
13 the Tiered Assessment of Cleanup Objectives, or TACO,  
14 guidance in January of this year.

15 Since then we have been very involved in the  
16 development of the three proposed rulemakings which  
17 are currently before the Board and which were part of  
18 the peer review group which met with the Agency to  
19 discuss drafts of these proposed revisions to 35  
20 Illinois Administrative Code 732.

21 Although noted in our prefiled testimony, I would  
22 like to again stress our appreciation to the Agency  
23 for their efforts to reach out and discuss these  
24 issues with the regulated community both in advance of

1 and during the rulemaking. Our discussions with the  
2 Agency have been cordial and productive. They have  
3 also led to a better understanding of our respective  
4 positions and a better exchange of ideas for improving  
5 the UST program. As a result, these hearings have  
6 been less contentious than the first two sets of  
7 hearings involving these rules.

8 Since our prefiled testimony was filed before we  
9 had an opportunity to review the Agency's testimony  
10 and before the hearings, it was necessary to identify  
11 certain issues which we felt would need further  
12 discussion. These included the new time limits on  
13 early action, the conditions for requiring groundwater  
14 investigations for No Further Action sites, the extent  
15 of required physical soil analysis for Methods One and  
16 Two, procedures for classification by exposure  
17 pathway, coordination between the proposed 35 Illinois  
18 Administrative Code 742 and this proposal,  
19 coordination between the new options for analysis and  
20 the reimbursement program, and the new recording  
21 requirements.

22 Based on the Agency response to our questions and  
23 those of other participants, we proposed language  
24 changes to the Agency. We are pleased that the Agency

1 agreed to most of these changes here today. I would  
2 like to underline two or three issues which are  
3 probably most significant so the need for these  
4 changes is clear.

5 The first deals with the use of the term  
6 stratigraphic unit. Although we did not disagree with  
7 the Agency's proposed definition, the implementation  
8 of the term in a soil investigation pursuant to  
9 732.307(d) would have required much unnecessary  
10 sampling. The Agency acknowledged as much in the  
11 first hearing and agreed to limit the sampling to  
12 those units which are most conducive to contaminant  
13 transport. Our understanding of this change is that  
14 the Agency was agreeing to consider issues such as  
15 visible particle size, geological classification,  
16 continuity, and the size of the unit in determining  
17 which unit must be included in the physical sampling  
18 program.

19 The Agency, after considering these issues, has  
20 today indicated that 732.307(d) will essentially stand  
21 as proposed in this particular. We believe that this  
22 does not allow for the judgment of a site  
23 professional. If every case requires employment of  
24 worst-case testing, then the professional judgment of



1 a site professional is a moot point. I would be  
2 better off spending my dollars for professional lab  
3 work than to have a site geologist present.

4 Today I defer to Mike Rapps' testimony on this  
5 issue but do reserve the right to file further  
6 comments for the IPC on this issue.

7 Secondly, we remain unsatisfied regarding the  
8 applicability of yield of a nonwater-bearing strata  
9 under 732.307(d)(2)(B). Since dissolved contamination  
10 travels with the water in situations where a saturated  
11 formation is present, yield and conductivity have a  
12 specific direct application. In an unsaturated strata  
13 movement is controlled by more factors, such as  
14 moisture content, type of soil, relative porosity,  
15 amount of free product present, et cetera. We'll be  
16 filing additional comments on this subject during the  
17 hearing process.

18 The third important change is a basis for the  
19 Agency to seek to void the NFR letter as included in  
20 Section 732.704(a)(4). Based on the discussion at the  
21 hearing, it was clear the Agency's initial  
22 interpretation of this section was broader than  
23 necessary given the context in which these letters  
24 would be issued. Unlike the Site Remediation Program,

1 Part 732 NFR letters are issued with regard to a known  
2 release from a known source and may be approved based  
3 on a statutory physical soil classification in which  
4 the levels of contaminants are not evaluated. These  
5 factors eliminate the need for a reopener based on  
6 unknown site conditions.

7 The Agency has proposed alternative language  
8 today which appears adequate on first look, but we  
9 will review and get back to the Board during the  
10 comment period. Based on these changes and others  
11 which we have proposed and which the Agency has  
12 accepted, we can state our support for these proposed  
13 revisions.

14 Of utmost importance to us is the tie between the  
15 risk-based corrective action provisions proposed under  
16 Parts 742 proposed and the additional soil  
17 classification methodology to allow those to be  
18 addressed in the context of the tank program. This  
19 alone will allow us to use private and public funds  
20 more effectively.

21 As always, we appreciate the opportunity to offer  
22 this testimony before the Board and are prepared to  
23 answer any questions.

24 Thank you.

1 HEARING OFFICER TIPSORD: There were no  
2 prefiled questions filed regarding Mr. Rapps'  
3 testimony. Does the Agency have any questions?

4 MR. RIESER: Mr. Gates.

5 HEARING OFFICER TIPSORD: I'm sorry, Mr.  
6 Gates. I apologize.

7 MS. ROBINSON: We have no questions.

8 HEARING OFFICER TIPSORD: Any questions for  
9 Mr. Gates?

10 Seeing none, thank you very much.

11 MR. GATES: Thank you.

12 MR. RIESER: Thank you.

13 HEARING OFFICER TIPSORD: That concludes our  
14 prefiled testimony.

15 Was there anyone else here today who wishes to  
16 testify at this proceeding?

17 Seeing none, we will proceed with the final  
18 housekeeping matters then.

19 As I indicated at the beginning of the hearing,  
20 and as we all are very aware, there's a March deadline  
21 for final adoption of this rule. Given the time frame  
22 necessary to allow for review by the Joint Committee  
23 on Administrative Rules, that places the Board in the  
24 position of having to go to second notice with this

1 rule by January 9th, 1997.

2 That being the case, we have little choice as to  
3 when final comments will be due. And basically those  
4 choices come down to Christmas Eve or the day before.  
5 We have requested an expedited transcript. And I am,  
6 barring severe objection, going to ask all comments be  
7 in the Board's office by December 23rd. Hopefully,  
8 that will allow me the opportunity to collect the  
9 comments and retire to Jerseyville for a few days to  
10 write a draft order for the Board and give the Board  
11 Members the opportunity to examine all final comments  
12 and give them the full weight they deserve.

13 Seeing no objection, then I will verbally order  
14 that all final comments be received by the Board by  
15 December 23rd, 1996.

16 Okay. I think that does it. Is there anything  
17 else? Are there any other motions or any other  
18 questions from the parties at this time?

19 Okay. Then we will await the filing of Exhibit  
20 Number 9 from Mr. Rapps and all of your final  
21 comments.

22 I thank you all for your cooperativeness and your  
23 preparedness. It's made these things go much faster.

24 Thank you very much. We're closed.

1 STATE OF ILLINOIS )  
 )SS  
2 COUNTY OF SANGAMON )

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CERTIFICATE

5

6 I, Dorothy J. Hart, affiliated with Capitol  
7 Reporting Service, Inc., do hereby certify that I  
8 reported in shorthand the foregoing proceedings; that  
9 the witness was duly sworn by me; and that the  
10 foregoing is a true and correct transcript of the  
11 shorthand notes so taken as aforesaid.

12 I further certify that I am in no way associated  
13 with or related to any of the parties or attorneys  
14 involved herein, nor am I financially interested in  
15 the action.

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21 Dated this 11th day of  
22 December, A.D., 1996, at  
23 Springfield, Illinois.

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