

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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STATE OF ILLINOIS
Pollution Control Board

IN THE MATTER OF:)
)
TIERED APPROACH TO CORRECTIVE) R06-10
ACTION OBJECTIVES: AMENDMENTS) (Rulemaking-Land)
TO 35 Ill. Adm. Code 742)
)

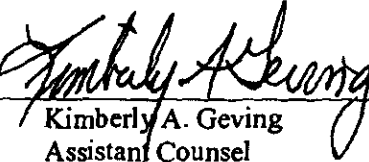
MOTION TO CORRECT THE TRANSCRIPT

NOW COMES the Illinois Environmental Protection Agency ("Agency") by one of its attorneys, Kimberly A. Geving, and pursuant to 35 Ill. Adm. Code 101.604 moves the hearing officer in this matter to correct the transcript of January 31, 2006 as follows:

<u>Page</u>	<u>Line</u>	<u>Correction</u>
3	22	Change "post" to "posed"
11	15	Change "modeled" to "model"
24	2	Change "states" to "sites"
27	8	Change "9061(a)" to "9060(a)"
27	22	Change "organ" to "organic"
28	4	Change "organ" to "organic"
28	5	Change "organ" to "organic"
28	11	Change "organ" to "organic"
28	13	Change "9060" to "9060(a)"
28	23	Delete the word "no"
44	11	Change "risk base" to "risk-based"
47	24	Change "three" to "there"
50	23	Insert "or" between "ingestion" and "inhalation"
55	3	Change "abbreviation" to "remediation"
55	12	Change "of" to "to"
56	14-15	Add a comma after "where" in line 14 and a comma after "compound" in line 15, delete the period in 15, and make the "the" lower case
64	19	Change "pHs" to "PAHs"
77	2	Change "vain" to "vein"
90	17	Change "appendix D" to "appendix B"

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: 
Kimberly A. Geving
Assistant Counsel
Division of Legal Counsel

Dated: February 17, 2006

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ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:

PROPOSED AMENDMENTS TO TIERED
APPROACH TO CORRECTIVE ACTION
OBJECTIVES (35 ILL. ADM. CODE 742)

R06-10
(Rulemaking-Land)

Proceedings held on March 1st, 2006, at 10:30 a.m. at the Illinois Environmental Protection Agency, North Entrance, TQM Room, 1000 E. Converse, Springfield, Illinois, before Richard R. McGill, Jr., Chief Hearing Officer.

Reported by: Beverly S. Hopkins, CSR, RPR
CSR License No.: 084-004316

KEEFE REPORTING COMPANY
11 North 44th Street
Belleville, IL 62226

1 HEARING OFFICER MCGILL: Sure. Yeah, that will not be a
2 problem. But go ahead, again just state your name and the
3 organization you're representing.

4 MR. THOMAS: Jarrett Thomas with Suburban Laboratories. I
5 too would like to give a brief summary.

6 HEARING OFFICER MCGILL: Okay. Just -- And that's fine. I
7 think we may save some time with the three Agency witnesses
8 unless -- before we went on the record I was conferring with
9 counsel for the agency, Ms. Kim Geving, and the Agency's
10 comfortable not providing brief summaries. Is there any
11 objection to the Agency's witnesses not running through a brief
12 summary of their testimony? Is there anyone who would rather
13 hear their summaries? Okay. Seeing no response, I think we'll,
14 at least with the Agency witnesses, dispense with the summaries.

15 Are there any questions about the procedures we're going to
16 be following today? I would ask that everyone please speak up
17 and try not to talk over one another so our court reporter can
18 clearly transcribe everyone's comments.

19 I'm going to -- At this point since the Agency witnesses
20 are not going to be providing any summaries of their testimony,
21 what I'd like to do is take care of some paperwork here. The
22 Agency filed a Motion to Correct Portions of the Hearing
23 Transcript, the first hearing transcript, the February 21, 2006,
24 motion. Is there any objection to granting that motion, to

1 corrections to the first hearing transcript? Seeing no
2 objection, I'll grant that Agency motion.

3 There are several proposed hearing exhibits. We had six
4 hearing exhibits from the first hearing. Now there are several
5 more Agency exhibits that are being proposed. The first is
6 Errata Sheet Number 3 from IEPA. Is there any objection to
7 entering that as a hearing exhibit? Seeing none, Errata Sheet
8 Number 3 will be Exhibit 7. Is there any objection to entering
9 into the record, as if read and made a hearing exhibit, the
10 Pre-filed Testimony of Gregory Dunn? Seeing none, I'll grant
11 that motion. That will be Exhibit 8, Pre-filed Testimony of Mr.
12 Dunn entered as if read. The next motion is for the Pre-filed
13 Testimony of Dr. Thomas Hornshaw of the Agency. Is there any
14 objection to entering that as a hearing exhibit and entering it
15 as if read? Seeing none, I'll grant that motion and that will be
16 Exhibit 9. And last, Pre-filed Testimony of Lawrence Eastep of
17 the Agency. Is there any objection to having that entered into
18 the record as if read and made a hearing exhibit? Seeing none,
19 that will be Hearing Exhibit 10. And that is entered into the
20 record as if read.

21 With that, at this point what I'd like to do is open it up
22 to questions for the Agency's witnesses. I understand the Agency
23 would like to field the questions as a panel. I'm going to go
24 ahead and have the court reporter swear in the Agency's witnesses

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ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
PROPOSED AMENDMENTS TO)
TIERED APPROACH TO)
CORRECTIVE ACTIO) No. R06-10
OBJECTIVES (35 ILL. ADM.) Rulemaking-Land
CODE 742))

The following is a transcript
held in the above-entitled cause, taken
stenographically before TERRY A. BUCHANAN,
CSR, a notary public within and for the
County of Will and State of Illinois, at
Suite N502, 160 North LaSalle Street,
Chicago, Illinois, on the 31st day of
January, A.D., 2006, commencing at 10:30
o'clock a.m.

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

2 ILLINOIS POLLUTION CONTROL BOARD,

3 100 West Randolph Street

4 Suite 11-500

5 Chicago, Illinois 60601

6 (312) 814-6983

7 BY: MR. RICHARD R. MCGILL, JR.

8 (HEARING OFFICER)

9 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,

10 1021 North Grand Avenue East

11 Springfield, Illinois 62794

12 (217) 782-5544

13 BY: MS. KIMBERLY A. GEVING and

14 MS. ANNET C. GODIKSEN

15 BOARD MEMBERS PRESENT: IEPA WITNESSES:

16 Nicholas Melas Thomas Hornshaw

17 Thomas Johnson Gregory Dunn

18 Andrea Moore Lawrence Eastep

19 G. Tanner Girard Douglas Clay

20 Anand Rao Gary King

21 Alisa Liu

22

23

24

1 HEARING OFFICER MCGILL: We're
2 going to go on the record.

3 Good morning. I'd like to
4 welcome you to this Illinois Pollution
5 Control Board hearing in Chicago.

6 My name is Richard McGill
7 and I'm the hearing officer for this
8 rulemaking proceeding docketed as
9 R06-10, in the matter of proposed
10 amendments to the tiered approach to
11 corrective actions objectives, 35
12 Illinois Administrative Code 742.

13 Briefly, by way of
14 background, on September 30, 2005 the
15 Board received this rulemaking proposal
16 from the Illinois Environmental
17 Protection Agency. Generally, the
18 tiered approach to corrective action
19 objectives, or TACO, rules provide
20 procedures for developing remediation
21 objectives based on risks to human
22 health post by sites environmental
23 conditions.

24 The Agency states that its

1 proposed amendments are designed to
2 improve procedures and reflect updated
3 contaminant standards, test methods and
4 toxicity criteria.

5 On October 20th, 2005, the
6 Board accepted the Agency's proposal
7 for hearing.

8 Today is the first hearing
9 in this rulemaking. A second hearing
10 is currently scheduled for March 1,
11 2006 in Springfield.

12 Also present today on behalf
13 of the Board, to my left, member Andrea
14 Moore, the lead Board member for this
15 rulemaking. To her left, Dr. Tanner
16 Girard, acting chairman of the Board
17 and to his left, member Thomas Johnson.
18 To my right, the Board's technical
19 unit, Anand Rao and Alisa Liu.

20 Today's proceeding is
21 governed by the Board's procedural
22 rules. All information that is
23 relevant and not repetitious or
24 privileged will be admitted into the

1 record.

2 We will begin with the
3 Agency's testimony. The Agency
4 prefiled its testimony, so they will be
5 providing summaries of that prefiled
6 testimony.

7 After that, we will have
8 questions from any members of the
9 public here as well as questions from
10 the Board for the Agency's witnesses.
11 After that, anyone else may testify
12 time permitting and I would expect
13 there will be time for that today.

14 Those who testify will be
15 sworn in and may be asked questions
16 about their testimony.

17 For those who wish to
18 testify today, but who did not prefile,
19 there is a sign-up sheet to my left
20 there in the center of the room by the
21 entrance.

22 For the court reporter
23 transcribing today's proceeding I would
24 ask that you, please, speak up and do

1 not talk over one another and, please,
2 identify yourself by name and title and
3 organization before giving testimony or
4 before posing a question.

5 Any questions about our
6 procedures today? Seeing none, I would
7 ask the court reporter to swear in the
8 Agency's witnesses collectively.

9 (Whereupon, the Agency's
10 witnesses were sworn in.)

11 HEARING OFFICER MCGILL: Thank
12 you. I will now ask Agency attorney,
13 Kimberly Geving to begin the Agency's
14 presentation.

15 MS. GEVING: Good morning. As
16 stated, my name is Kim Geving. I am
17 assistant counsel for the division of
18 legal counsel, bureau of land, Illinois
19 Environmental Protection Agency and to
20 my right is co-counsel Annet Godiksen,
21 assistant counsel for the bureau of
22 air.

23 This morning we're going to
24 start with testimony summary by Gary

1 King who is to my far right.

2 Mr. King, I'm going to show
3 you what's been marked as Exhibit 3 for
4 identification and if you could,
5 please, tell me what that is.

6 MR. KING: This is a copy of the
7 testimony that I prepared for purposes
8 of this proceeding.

9 MS. GEVING: Is that a true and
10 accurate copy of what we filed with the
11 Pollution Control Board in this matter?

12 MR. KING: Yes, it is.

13 MS. GEVING: At this time I
14 would request that the Board accept
15 this into the record.

16 HEARING OFFICER MCGILL: Okay.
17 Just for clarification, this is being
18 marked as Exhibit 3. There are
19 Exhibits 1 and 2 which the Agency plans
20 to be offering. Those are errata
21 sheets one and two respectively.

22 Regarding Exhibit 3,
23 Mr. Gary King's prefiled testimony, is
24 there any objection to entering this as

1 Hearing Exhibit 3 and entering it into
2 the record as if read? Seeing none,
3 we'll do that.

4 MS. GEVING: Mr. King, if you
5 would, please, provide a summary of
6 your testimony for the record?

7 MR. KING: As I said, my name is
8 Gary King. I'm the manager of the
9 division of remediation management
10 within the bureau of land of the
11 Illinois EPA. I've been in that title
12 since May of 1990. Within that
13 division are three sections, all of
14 which deal with remediation efforts of
15 the agency and all three of which deal
16 with the TACO regulations that we're
17 here to talk about this morning.

18 I've testified in numerous
19 rulemaking proceedings before the
20 Board, including all of the rulemakings
21 under Title 17 that led to the adoption
22 of the site remediation program and to
23 the TACO rules.

24 In this case we're proposing

1 amendments to part 742. We've been
2 implementing part 742 since it was
3 adopted in 1997. It has proven to be a
4 very effective methodology for
5 developing remediation objectives. I
6 had the opportunity to do some
7 traveling on behalf of the Illinois EPA
8 through our national trade organization
9 and I certainly get a lot of inquiries
10 as to what Illinois does and is doing
11 with regards to their remedial
12 objectives program under TACO and I've
13 personally spoken with state
14 environmental representatives from
15 Indiana, Missouri, Wisconsin, New York
16 and Mississippi as they have developed
17 their own state programs and have
18 looked to Illinois TACO rules to help
19 guide their decision-making.

20 As we have progressed with
21 the implementation of TACO over the
22 last year -- eight years we have found
23 the need for updating and refinements
24 either based on new information, that's

1 something I'm going to be talking about
2 a little bit later, or from operational
3 experience, which is one of the things
4 I'm talking about this morning.

5 I'm not going to go through
6 all the changes that are discussed in
7 my testimony, but just let me talk
8 about a couple of things.

9 We made some changes to the
10 applicability provision and those
11 aren't really -- those are not intended
12 to do anything new with regards to how
13 the TACO rule operates, but they
14 represent longstanding Agency practices
15 in interpreting TACO. For instance, in
16 the original TACO rulemaking in 1997 I
17 testified that landfills were not an
18 appropriate fit for use of TACO because
19 of technical and regulatory issues and
20 really 742.105(h), that's really
21 confirming that concept.

22 We've made a number of
23 changes on the institutional control
24 provisions and those are really

1 intended to reflect our experience with
2 regards to using those institutional
3 controls over the last eight years.

4 One of the things we
5 progressed in implementing the rule
6 when it first came out, it was just the
7 rulemaking language and we learned that
8 it would be appropriate to develop
9 model documents. We developed model
10 documents over the years. We then took
11 those model documents and posted them
12 on our web site to make them easy to
13 use. We now think we're at a point
14 where it's appropriate to codify those
15 modeled documents within the TACO rule
16 itself. That will help in terms of --
17 sometimes we've had issues come up and
18 we wanted to make sure that those were
19 clarified and that the format of how
20 those documents should be handled
21 should be -- place it right in the rule
22 itself.

23 I think that concludes my
24 summary of my testimony. I'll be happy

1 to take questions at this time.

2 HEARING OFFICER MCGILL: Does
3 the Agency prefer to take questions of
4 an individual witness or as a panel?

5 MS. GEVING: I would prefer we
6 do it as a panel.

7 HEARING OFFICER MCGILL: That's
8 fine. Why don't you proceed then with
9 your next witness?

10 MS. GEVING: My next witness is
11 Dr. Tom Hornshaw who is the manager of
12 the toxicity assessment unit for our
13 Agency and I have three documents to
14 show you this morning, Dr. Hornshaw.

15 The first one has been
16 marked as Exhibit 1 for identification.
17 If you could take a look at that,
18 please, and identify it for the record.

19 MR. HORNSHAW: This is errata
20 sheet number one.

21 MS. GEVING: And is that a true
22 and accurate copy of what we filed with
23 the Pollution Control Board?

24 MR. HORNSHAW: Yes, it is.

1 MS. GEVING: Thank you very
2 much. I'm going to show you now
3 Exhibit 2 marked for identification.
4 If you could, please, identify that for
5 the record?

6 MR. HORNSHAW: Errata sheet
7 number two.

8 MS. GEVING: And is that a true
9 and accurate copy of what we have filed
10 with the Pollution Control Board?

11 MR. HORNSHAW: Yes, it is.

12 MS. GEVING: The third is marked
13 as Exhibit 4 for identification. If
14 you could, please, identify that.

15 MR. HORNSHAW: This is a copy of
16 the prefiled testimony I prepared for
17 this hearing.

18 MS. GEVING: And is that a true
19 and accurate copy of what we filed with
20 the Pollution Control Board?

21 MR. HORNSHAW: Yes, it is.

22 MS. GEVING: At this time I
23 would request that the Board accept
24 these into the record as if read and

1 then Dr. Hornshaw may provide his
2 summary of testimony.

3 HEARING OFFICER MCGILL: Okay.
4 We'll take these one at a time.

5 There's a motion to enter
6 errata sheet number one as a hearing
7 exhibit. Is there any objection to
8 that? Seeing none, errata sheet number
9 one is Hearing Exhibit No. 1.

10 The second motion is for
11 errata sheet number two to become
12 Hearing Exhibit No. 2. Is there any
13 objection to that? Seeing none, errata
14 sheet number two will be our Hearing
15 Exhibit No. 2.

16 And finally a motion to
17 enter as if read the prefiled testimony
18 of Thomas Hornshaw. Any objection to
19 that? Seeing none, that will be
20 entered as if read and will be
21 designated as Hearing Exhibit 4. Thank
22 you.

23 MS. GEVING: Dr. Hornshaw, you
24 may proceed with your summary.

1 MR. HORNSHAW: Before I
2 summarize my testimony I have to
3 confess that it's probably my fault
4 primarily that we had to do errata
5 sheet numbers one and two. I've been
6 extremely busy with writing the report
7 that the legislature has required of us
8 regarding flame retardants and I didn't
9 get a chance to review the full copy of
10 TACO until very late in the proceedings
11 when I caught some of the typos and
12 things that I will be discussing, so I
13 confess, I was the culprit.

14 Regarding my testimony, it's
15 in four pieces basically. The first
16 has to do with toxicity information
17 that has changed from USEPA. As in the
18 first amendment to TACO there are a
19 handful of chemicals that USEPA has
20 updated the toxicity data. There are
21 six of them this time that require
22 changes in the Tier 1 tables. We also
23 learned in discussions with our
24 counterparts in region five, the

1 toxicologist in region five, that EPA
2 does Manganese kind of differently, the
3 chemical Manganese differently. When
4 they developed the toxicity information
5 originally they did not account for the
6 Manganese that people take from their
7 diet so they have since reduced the
8 toxicity criteria to account for the
9 exposure that comes from diet and water
10 so we've done that with Manganese in
11 the Tier 1 tables as well.

12 The second portion of my
13 testimony deals with lead. There have
14 -- in the original TACO the only
15 toxicity information available is
16 regarding childrens exposure to lead
17 and soil and because of that objective
18 for all of the exposure routes;
19 residential, industrial, commercial,
20 construction and migration to
21 groundwater were 400 milligrams per
22 kilogram in the soil because that was
23 the only data available. Since then we
24 have talked with USEPA staff about how

1 to deal with adult exposures to lead.
2 We have used the adult blood lead model
3 to calculate objectives for industrial,
4 commercial and construction workers
5 rather than have them based on a
6 child's exposure and we also got a
7 document from USEPA that gives us a way
8 of calculating pH specific migration to
9 groundwater objectives. So we're
10 proposing to fill in the Tier 1
11 toxicity tables with new values for
12 lead.

13 Another thing that I'm
14 testifying to has to do with the major
15 nutrients, calcium, magnesium,
16 phosphorous, sodium and potassium.
17 We've had numerous inquiries about how
18 to deal with these major nutrients
19 because laboratories quite often report
20 them. When they show up on an
21 analytical sheet some people have
22 determined that they need objectives
23 for them so what we did was look at the
24 intakes that would come from normal

1 diet and made calculations based on how
2 much that intake would compare with the
3 intakes that are assumed for the TACO
4 cleanup calculations and we have
5 decided that most of the major
6 nutrients do not need to have cleanup
7 objectives because the daily diet is
8 already so much more than you would
9 expect just from incidental ingestion
10 of soil.

11 And then the last thing on
12 my testimony deals with a lot of the
13 things that are in the two errata
14 sheets, minor changes and corrections
15 in the text. There were some
16 formatting problems that occurred and
17 so we made quite a bit of changes that
18 were either held over from the previous
19 update of TACO and there were some text
20 corrections that had to be made as well
21 as some formatting problems that turned
22 up some screwy things in the draft
23 that's before the Board right now.

24 A couple of other things, we

1 had to update analytical methodology
2 and a couple of the incorporations by
3 reference to bring them up-to-date with
4 current publications.

5 We had to clarify how
6 compositing and averaging should be
7 done to show compliance with
8 remediation objectives and finally,
9 because of a quirk in the software that
10 we use to calculate remediation
11 objectives, we found that our software
12 treated mercury as a particulate even
13 for the inhalation exposure route and
14 when we forced it to treat it as a
15 vapor instead of a particulate it
16 resulted in fairly large changes in the
17 remediation objectives for mercury for
18 the construction worker and the
19 industrial commercial worker, so we
20 made those changes.

21 That's the summary of my
22 testimony.

23 HEARING OFFICER MCGILL: Thank
24 you.

1 MS. GEVING: The Agency's third
2 witness is Larry Eastep. Larry is now
3 retired, but he is the former manager
4 of the remedial project management
5 section and is back on contract with
6 the state for purposes of this hearing.

7 Mr. Eastep, I'm going to
8 show you what's been marked as
9 Exhibit 5 for identification. If you
10 would, please, identify that for the
11 record.

12 MR. EASTEP: This is a copy of
13 the prefiled testimony that I prepared.

14 MS. GEVING: Is that a true and
15 accurate copy of what we filed with the
16 Pollution Control Board?

17 MR. EASTEP: Yes, it is.

18 MS. GEVING: At this time I
19 would request that the Board enter this
20 into the record as read.

21 HEARING OFFICER MCGILL: We have
22 a motion to enter into the record as if
23 read the prefiled testimony of Lawrence
24 Eastep. Any objection to that? Seeing

1 none, we will enter this as a Hearing
2 Exhibit 5 and enter it into the record
3 as if read.

4 MS. GEVING: Mr. Eastep, you may
5 proceed with your summary.

6 MR. EASTEP: I really prepared
7 testimony to address two issues. The
8 first of which is being the background,
9 polynuclear aromatic hydrocarbons.
10 Because of the experience in the site
11 remediation program it became evident
12 after a couple of years that we were
13 seeing levels of certain polynuclear
14 aromatic hydrocarbons or PNAs as I'll
15 refer to them. We were seeing PNAs
16 occur very frequently in situations not
17 just in heavily industrialized areas,
18 but throughout the state as well. The
19 more we looked into it the more we
20 became aware that there was perhaps a
21 background in the state of these
22 particular chemicals, although we
23 didn't -- at the time we didn't have
24 enough information to really quantify

1 what that background was.

2 In about 19 -- excuse me.

3 About 1999 or 2000 we started
4 addressing the issue and we addressed
5 it really two ways. A Brownfield's
6 grant was issued to the City of Chicago
7 to do a PNA background study strictly
8 within the city limits of Chicago. We
9 also talked with the Electric Power
10 Research Institute, which is a group
11 that is funded -- it's a nationwide
12 group funded by utilities across the
13 country and they were also interested
14 in this topic and so the Electric Power
15 Research Institute or EPRI conducted a
16 study across the state exclusive of the
17 boundaries of the city of Chicago. We
18 weren't active partners nor did we fund
19 the EPRI study, but we did work with
20 them throughout the process and we were
21 in constant communication and
22 consultation with EPRI.

23 What resulted from both of
24 these studies were the identification

1 of naturally occurring levels of PNAs
2 throughout the state in what we've
3 defined as populated areas and what we
4 did here with this change is we created
5 a table and allowed people to use, if
6 they qualify, to use the background
7 PNAs. I'll be available for questions
8 later on the PNA issue.

9 The other particular part
10 that I addressed, the inclusion of
11 construction worker objectives for
12 certain chemicals in appendix B, table
13 A for the residential scenario. There
14 are a number of chemicals that have
15 industrial, commercial, construction
16 worker remedial inhalation objectives
17 that are more stringent than
18 residential inhalation objectives.
19 However, the manner in which TACO is
20 used allows for the construction
21 activities on residential properties.
22 For example, a site cleaned up to
23 residential objectives might be
24 expected to have construction on

1 residential property, et cetera.
2 Additionally, many states clean up to
3 TACO residential objectives even though
4 the intended use of the property might
5 be industrial. In other words, they're
6 kind of going that extra step to clean
7 up a little better. Therefore, in
8 order to protect the construction
9 worker we felt that it was necessary to
10 apply industrial, commercial
11 construction worker remedial inhalation
12 objectives to residential scenarios.
13 Trying to do that, there were several
14 options we could have looked at and we
15 felt that since there were only 28
16 chemicals involved, what we did was
17 footnote those 28 chemicals in the Tier
18 1 table and that footnote directs the
19 reader to apply the construction worker
20 inhalation objectives in these
21 particular instances.

22 That concludes my summary.

23 HEARING OFFICER MCGILL: Thank
24 you. Why don't we proceed with your

1 next witness then?

2 MS. GEVING: The Agency's fourth
3 witness is Greg Dunn and Greg is the
4 manager of one of the voluntary site
5 remediation units for the Agency.

6 Greg, I'm going to show you
7 what's been marked as Exhibit 6 for
8 identification. If you would, please,
9 identify that for the record.

10 MR. DUNN: This is a copy of my
11 prefiled testimony.

12 MS. GEVING: Is that a true and
13 accurate copy of what we filed with the
14 Pollution Control Board?

15 MR. DUNN: Yes, it is.

16 MS. GEVING: At this time I
17 would request that the Board enter this
18 into the record as if read.

19 HEARING OFFICER MCGILL: There's
20 a motion to enter into the record as if
21 read the prefiled testimony of Gregory
22 Dunn. Is there any objection to that?
23 Seeing none, this will be entered into
24 the record as if read and identified as

1 Hearing Exhibit 6. Thank you.

2 MS. GEVING: Mr. Dunn, you may
3 proceed with your summary.

4 MR. DUNN: Thank you, Kim.

5 Good morning. Again, my
6 name is Greg Dunn. I am manager of one
7 of the voluntary site remediation units
8 with the bureau of land at the Illinois
9 Environmental Protection Agency. My
10 testimony has been prefiled, therefore,
11 I will summarize my testimony.

12 The Agency is proposing a
13 number of changes to the incorporations
14 by reference. This is done to update
15 to the most current and up-to-date
16 documents available to us and those
17 changes are outlined in my proposal, in
18 my prefiled testimony.

19 The second area is
20 determining fraction organic carbon.
21 This problem was identified by an
22 outside lab to us about a month -- a
23 year and a half ago that the way the
24 fraction organic carbon was calculated

1 may be wrong. There are two methods
2 identified in TACO right now to
3 determine the fraction organic carbon
4 of a site. The first one is the ASTM,
5 that's the American Society for Testing
6 Materials method D2974 and USEPA SW-846
7 method 9060(a). I'm going to briefly
8 go over the two methods. 9061(a) is a
9 water method. However, you can modify
10 this method for soil. However, this
11 method had some problems. The sample
12 amount that you use for this method is
13 very small, somewhere in the range of
14 ten to 50 milligrams and there is no
15 standard protocol to modify this method
16 for soils. With the small sample that
17 you have to analyze for the fraction
18 organic carbon obtaining reproducible
19 results are very difficult. Method
20 9060(a) does give you a total organic
21 carbon number, however. Under the ASTM
22 method it produces a total organ matter
23 concentration. This is an identified
24 method that has been widely used

1 throughout by ASTM and this is
2 something they have put out for
3 everybody to use. The problem with the
4 ASTM method, it is a total organ matter
5 not a total organ carbon. However,
6 under Nelson and Sommers they state
7 that there is a conversion factor that
8 you can use for the ASTM method
9 anywhere from 0.5 to 0.58 to convert
10 from total organic matter to total
11 organ carbon. Therefore, the Agency is
12 proposing to leave the ASTM method in
13 TACO and remove the 9060 USEPA method.
14 At the same time, we will leave the
15 reference to Nelson and Sommers. That
16 is all located in 742.215 and also in
17 appendix C, table F.

18 HEARING OFFICER MCGILL: I'm
19 sorry, table?

20 MR. DUNN: Table F.

21 One of my other issues is
22 under 742.305(e), an exposure route may
23 not be excluded if no soil exhibits the
24 characteristics of toxicity for

1 hazardous waste as determined by
2 721.124 or an alternative method
3 determined by the Agency. There is no
4 alternative method determined by the
5 agency to determine toxicity,
6 therefore, the Agency proposes to
7 delete alternative method.

8 Under 742.320(d), it does
9 identify that an ordinance within
10 2,500 feet from the source has to be
11 used to exclude a groundwater exposure
12 route pathway. However, there are many
13 sites that have come through the site
14 remediation program where the source of
15 the release has been located within
16 this 2,500 feet barrier from a
17 municipal boundary that has a
18 groundwater ordinance.

19 Within this 2,500 feet these
20 people cannot use the groundwater
21 exclusion pathway. Therefore, the
22 Agency is proposing to remove the
23 2,500 foot exclusion from this part
24 because there are a number of sites

1 where the source of release, even
2 though it's located within 2,500 feet,
3 the extent of the contamination which
4 has to be determined by the regulations
5 anyway may only extend a short
6 distance. Therefore, there should be
7 no reason why they cannot still use the
8 exclusion -- groundwater exclusion
9 pathway under 320. We propose to take
10 out the 2,500 feet from that section.

11 Under 742.805(c)(1) there's
12 a number of contaminants that are
13 identified in this section and they
14 range from 2 to 14. However, if you
15 review appendix A, table E and appendix
16 A, table F, the actual range should be
17 from 2 to 33. Therefore, the Agency is
18 proposing to revise that to -- from 2
19 and 14 to 2 to 33.

20 Under 742.1015(b)(2) the
21 word modeled was inadvertently left off
22 after the last TACO rulemaking and,
23 therefore, the Agency proposes to
24 reinsert modeled after contamination in

1 742.1015(b)(2).

2 My last area is in appendix
3 C, table D, the symbol for soil bulk
4 density is mislabeled and, therefore,
5 the Agency proposes to correct that.
6 That concludes my testimony.

7 HEARING OFFICER MCGILL: Thank
8 you. Why don't we go off the record
9 for a second?

10 (Whereupon, a discussion
11 was had off the record.)

12 HEARING OFFICER MCGILL: The
13 Agency has concluded with its witnesses
14 who prefiled their testimony, so I will
15 turn it back over to Kimberly Geving to
16 introduce the last Agency witness.

17 MS. GEVING: Yes. The last
18 Agency witness is Doug Clay who is the
19 manager of the leaking underground
20 storage tank section for the Agency and
21 he is here for purposes of questions as
22 a panel.

23 HEARING OFFICER MCGILL: Thank
24 you. Thank you all for your testimony

1 and for being here today.

2 Before the Board proceeds
3 with some of the questions it has we'd
4 like to open it up to members of the
5 public who are present here who may
6 have a question for any of the Agency's
7 witnesses. I would ask, if you do have
8 a question, to just signal me first and
9 state your name, title and any
10 organization that you're representing
11 before you proceed with your question.

12 So with that, does anyone
13 have any questions for any of the
14 Agency's witnesses? Go ahead. Again,
15 if you would state your name and title
16 and organization, please.

17 MR. THOMAS: My name is Jarrett
18 Thomas. I'm with Suburban
19 Laboratories. I'm vice-president of
20 Suburban Laboratories, an environmental
21 testing laboratory. I'm also president
22 of an environmental -- Illinois
23 Association of Environmental
24 Laboratories.

1 HEARING OFFICER MCGILL: Would
2 you mind stepping up here to the front?

3 MR. THOMAS: Sure.

4 HEARING OFFICER MCGILL: Thanks
5 a lot. Let's go off the record for a
6 moment.

7 (Whereupon, a discussion
8 was had off the record.)

9 HEARING OFFICER MCGILL: Why
10 don't we go back on the record?

11 Please proceed with your
12 questions.

13 MR. THOMAS: I have a few
14 questions, most of which are going to
15 be related to the ADLs and TACO
16 objectives itself and the ability to
17 achieve those limits analytically, but
18 I have a couple quick questions with
19 regards to FOC.

20 Is there any reason why the
21 Agency didn't include the actual factor
22 to be used for the determination of
23 FOCs? You mentioned the range of -- I
24 think it was .5 or .58. Is that

1 something that could be specified in
2 the actual reference so as to alleviate
3 any potential confusion as to what
4 factor to use?

5 MR. DUNN: Under Nelson and
6 Sommers they give a typical range of
7 0.5 to 0.58. However, in some of their
8 literature, when you read through
9 Nelson and Sommers, it can be as high
10 as .86. So you can have a conversion
11 factor as high as .86. When we
12 discussed this conversion factor we did
13 not want to put a number in there that
14 would set exactly what that conversion
15 factor would have to be. We want the
16 consultants to propose a conversion
17 factor to us. We have widely accepted
18 the 0.5 to 0.58 conversion factor.
19 However, if a consultant wants to come
20 in and prove that they can have a
21 higher conversion factor, we were going
22 to allow that, that's why we didn't put
23 an actual number in there.

24 MR. THOMAS: At that point would

1 the consultant need to justify the
2 factor they provided if it was in that
3 range or do they just simply use -- use
4 whatever factor as long as it's within.
5 .5 to .58 without any support for that
6 factor.

7 MR. DUNN: The factor between .5
8 and .58 they can use without pretty
9 much any justification. Once we get
10 above that -- the .58 conversion factor
11 -- we assume they won't go below, but
12 once they go above the .58 they're
13 going to have to have some kind of
14 justification.

15 MR. THOMAS: The remainder of my
16 comments have to do primarily with the
17 ADLs that are specified in the TACO
18 tables. I guess my first question is
19 how were those ADLs actually
20 determined?

21 MR. HORNSHAW: You're testing my
22 memory a little bit. In the original
23 TACO rulemaking we looked through the
24 -- all the different SW-846 and USEPA

1 drinking water methodologies to
2 determine the lowest detection limit
3 from any of the methodologies that
4 pertain to a particular analyte and if
5 the calculated risk based remediation
6 objective was less than the lowest of
7 the detection limits then we used the
8 lowest detection limit, the ADL, as the
9 remediation objective.

10 I believe in the first
11 update to TACO we updated some of those
12 ADLs and I'd really have to go back and
13 look through either my testimony or
14 somebody from my unit's testimony on
15 that.

16 I'm not sure about this
17 current update, if there are reasons to
18 update any of the ADLs.

19 MR. THOMAS: For some of the
20 analytes where there was no specific
21 detection limit -- let me rephrase
22 this.

23 Were all the ADLs that are
24 listed in TACO, did those all come from

1 the USEPA methodology reference?

2 MR. HORNSHAW: Yes. Either the
3 SW-846 methods or the EPA drinking
4 water methods for groundwater criteria.

5 HEARING OFFICER MCGILL: Could I
6 just ask both of you to speak up a
7 little bit. With the air conditioning
8 and we're having a hard time hearing
9 you? Thanks.

10 MR. THOMAS: And you mentioned
11 that there were actual detection limits
12 were what was used for the ADL, not
13 quantitation limits, it was the method
14 of detection from those methods?

15 MR. HORNSHAW: Right. It's
16 defined in TACO as the lowest PQL,
17 practical quantitation limit.

18 MR. THOMAS: There is a
19 difference between PQL and detection
20 limit as defined, but you said earlier
21 that was the lowest detection limit?

22 MR. HORNSHAW: Right. And ADL
23 is specifically defined in the
24 definition section as being the lowest

1 PQL of any method.

2 MR. THOMAS: One of the tables
3 -- one of the issues that we are trying
4 to review these ADLs is that there's
5 groundwater limits and soil limits and
6 in looking at the groundwater
7 objectives there were no ADLs listed.
8 It seems like all the ADLs were listed
9 on for soil, but appendix A, table A is
10 being proposed to be changed to table
11 I, but originally H, that's the
12 chemicals, Tier 1, class one,
13 groundwater remediation objectives
14 exceeds the one, one million cancer
15 risk by concentration. There's
16 actually ADLs listed there for
17 groundwater.

18 What is it the same type of
19 situation in terms of how those were
20 evaluated, just the lowest detection in
21 the method applied and then ADLs --

22 MR. HORNSHAW: That's correct.

23 MR. THOMAS: Okay. Why are ADLs
24 listed in TACO at all? What's the

1 purpose of having those listed there?

2 MR. HORNSHAW: The purpose of
3 having them there is to allow the
4 determination of a remediation
5 objective that is verifiable and
6 achievable. Some of the chemicals,
7 especially the -- almost entirely the
8 carcinogens, have risk based values
9 that are less than the lowest of the
10 detection limits that we could find and
11 if you can't show that the chemical is
12 there because the detection limit is a
13 problem then we reasoned in the
14 original TACO that the detection limit
15 would have to be a remediation
16 objective just because you can't go
17 lower than that and I might add, the
18 620 standards specify that -- for
19 carcinogens -- not the standards, but
20 the health advisory section specifies
21 for carcinogens the groundwater
22 objective -- the groundwater health
23 advisory is the lowest PQL.

24 MR. THOMAS: Are you familiar

1 with the SW-846 definition of PQL in
2 that the method allows for PQLs to be
3 elevated based on the type of matrix?
4 For example, most methods specify --

5 HEARING OFFICER MCGILL: Excuse
6 me. If you want to provide testimony
7 I'm going to go ahead and swear you in.
8 It might make sense if there's some
9 substantive pieces of information you'd
10 like the Board to consider.

11 MR. THOMAS: Sure.

12 (Mr. Thomas was sworn in by
13 the court reporter.)

14 MR. THOMAS: I was saying that
15 the definition of the practical
16 quantitation limit in SW-846 provides
17 for matrix effects and the PQLs listed
18 are necessarily always achievable. For
19 groundwater, for example, most SW-846
20 methods have a factor of ten that they
21 -- they have applied to the detection
22 limit. Some soil, for example, has
23 different factors as high as, I
24 believe, 600 times the factor -- the

1 actual detection specified in the
2 method.

3 Were those factors at all
4 considered when putting these
5 ADLs in for soil and groundwater?

6 MR. HORNSHAW: Yes, they were.
7 I'm kind of testifying for Jim O'Brien
8 who did all of the testimony regarding
9 ADLs in the original TACO hearing. I'm
10 testifying from memory right now, but
11 I'm almost positive that all of the
12 modifying factors were used in
13 developing the ADL list.

14 MR. THOMAS: And are you aware
15 that the environmental laboratory
16 community cannot achieve all of the
17 ADLs and all of the TACO objectives
18 that are currently specified in TACO?

19 MR. HORNSHAW: I'm not the one
20 who should be testifying to that.

21 MR. THOMAS: Maybe I'll ask Greg
22 that question since I know I've had
23 a lot of conversations with Greg over
24 the years about what the environmental

1 lab community can do and what it can't.

2 Greg, are you aware that
3 there is some real problems achieving
4 the necessary TACO objective as they
5 stand right now in TACO?

6 MR. DUNN: Yes. It has been
7 discussed between not only us, but a
8 couple other labs.

9 MR. THOMAS: Was there a reason
10 why that -- that there were no changes
11 to these ADLs or to the TACO objectives
12 to create ADLs where ones didn't exist
13 in response to that?

14 MR. HORNSHAW: Again, I can't
15 totally testify to this, but it's my
16 recollection that the SW-846 methods
17 that were on the books when we did the
18 first update have not changed with
19 maybe a couple of exceptions. So I
20 didn't think there was reason to change
21 the ADLs for this update.

22 MR. THOMAS: I guess back to my
23 question as to why ADLs are included in
24 the -- in TACO at all.

1 If different programs
2 reference TACO for their own specific
3 reasons, why wouldn't the analytical
4 requirements, detection limits and so
5 forth for those programs be specified
6 in the program because they may have
7 different requirements than TACO in
8 terms of the analytical objectives?
9 For example, the method references, for
10 example, TACO lists dozens of method
11 references for drinking water, but
12 drinking water is not a applicable
13 matrix when you're talking about soils.
14 You can't reference a drinking water
15 MDL or PQL when you're running a soil
16 SW-846 procedure. They're completely
17 separate.

18 Why does TACO include any
19 information with regards to the method
20 to be selected or the detection limits
21 that the laboratory needs? Shouldn't
22 that be placed in the applicable
23 program side of the regulatory
24 requirements? There's a lot of things

1 in TACO that I don't understand why
2 there's reference to SW-846 when
3 there's -- nowhere in TACO does it
4 state you need to use SW-846? That's a
5 program issue.

6 MR. HORNSHAW: Again, I'm
7 probably not the best person to testify
8 to this, but as I stated before, we had
9 to have objectives and they had to be
10 achievable. They couldn't be totally
11 risk base because the laboratories
12 can't go as low as some of the risk
13 based values. So they had to go into
14 the rule. It's a one size fits all
15 rule. It applies to whatever programs
16 are allowed to use it. It just made
17 sense to have them there.

18 MR. THOMAS: Even though
19 drinking water methods are referenced
20 here and used as a guidance for some of
21 these ADLs, have no applicability with
22 regards to soil, groundwater that are
23 being run primarily for TACO?

24 MR. HORNSHAW: Well, they would

1 have applicability to groundwater.

2 MR. THOMAS: Do the other
3 regulatory programs like SRP reference
4 groundwater methods or drinking water
5 methods, I should say, in their
6 requirements? Do they reference
7 anything to do with what method should
8 be followed.

9 MS. GEVING: If we could take
10 just a moment?

11 HEARING OFFICER MCGILL: Sure.
12 Before we go off the record I'll just
13 remind everyone that we do have a
14 second hearing scheduled about a month
15 from now and if the Agency cares to,
16 they certainly may supplement their
17 responses with testimony at that
18 hearing and certainly you, sir, will
19 have an opportunity to provide
20 testimony at that hearing. In
21 addition, everybody can provide written
22 public comment. Just to be clear, if
23 someone wants to postpone responding to
24 make a more complete or thoughtful

1 answer, they'll have a later
2 opportunity.

3 MR. THOMAS: I would like to
4 just mention that the Laboratory
5 Association did intend to present
6 testimony, but a lot of these questions
7 were completely unanswered and we felt
8 it was premature until we got some of
9 these questions answered. We probably
10 will be at the next hearing.

11 HEARING OFFICER MCGILL:
12 Terrific. Why don't we go off the
13 record for a moment?

14 (Whereupon, a discussion
15 was had off the record.)

16 HEARING OFFICER MCGILL: Why
17 don't we go back on the record? The
18 Agency can proceed with its response.

19 MR. DUNN: Concerning the
20 question are drinking water methods
21 identified in 740, under the
22 incorporations by reference Section,
23 740.125 it does reference USEPA method
24 -- or USEPA SW-846. It also identifies

1 methods for the determination of
2 organic compounds in drinking water
3 supplement two to that and supplement
4 three to that. So it does identify
5 drinking water -- the method for
6 drinking water in 740.

7 MR. CLAY: And with regard to
8 the leaking underground storage tank
9 program under 732.104 SW-846 is also
10 incorporated by references.

11 MR. EASTEP: Can I add one
12 thing? If you look at the
13 applicability of 742, it's not
14 restricted to LUST or the SRP.

15 MS. GEVING: For clarification
16 of the record, LUST stands for leaking
17 underground storage tank.

18 MR. EASTEP: Sorry.

19 MR. CLAY: Also, the two methods
20 that Greg referred to as far as
21 incorporation by reference, the methods
22 for the detection of organic compounds
23 in drinking water and determination of
24 organic compounds supplement three is

1 also referenced in leaking underground
2 storage tank regulations.

3 MR. KING: I guess I'm a little
4 bit confused by the question in terms
5 of, are you suggesting we should be
6 changing either what we have proposed
7 here in a certain way or suggesting the
8 program rule should be changed in some
9 fashion?

10 MR. THOMAS: I don't know and
11 that's why I'm trying to get these
12 questions answered. We've had a lot of
13 discussions in the association about
14 what do we suggest or what do we submit
15 to address some of these problems that
16 the industry has been having with
17 meeting of TACO objectives and it seems
18 to be that either the program -- the
19 program itself needs to be expanded to
20 include analytical requirements or TACO
21 needs to be expanded to improve
22 regulatory requirements. There's a
23 little bit of both in each regulation.
24 If the SRP and LUST and all the

1 individual programs specify the methods
2 to be used, then why should they be
3 included in TACO as well, if TACO is
4 meant to be the one place where all of
5 these other regulations refer or they
6 go to to get their objectives, then
7 shouldn't TACO be a place for that,
8 just the objective and not necessarily
9 where the analytical requirements
10 should be found.

11 HEARING OFFICER MCGILL: Where
12 the analytical --

13 MR. THOMAS: Where the
14 analytical requirements should be
15 found.

16 HEARING OFFICER MCGILL: If I
17 could just ask you to slow up a little
18 bit because I'm having a hard time
19 following and she's trying to get it
20 all down. Thanks.

21 MR. THOMAS: Again, as an
22 association we're trying to prepare our
23 testimony to deal with these problems
24 that we're experiencing as an industry

1 and we don't know where we should be
2 submitting these comments or what
3 exactly we should be commenting on.
4 There's ADLs in TACO. A lot of them
5 reference drinking water even though
6 drinking water is not applicable to
7 soil. There's situations, and I guess
8 my next question was going to be how
9 does the Agency currently handle
10 situations where they get analytical
11 data that does not meet the TACO
12 objectives?

13 MR. DUNN: Under the site
14 remediation program at least when the
15 project manager receives a report where
16 we have a compound or two that exceeds
17 a remediation objective in TACO they
18 have to address that compound one way
19 or another, whether it be through
20 modeling. If it's in the soil, they
21 can model it -- theoretical model to
22 ground water. If it's an objective
23 that exceeds ingestion inhalation
24 route, we may expect them to put some

1 kind of barrier in there to address
2 that compound.

3 MR. CLAY: And that would be the
4 same with the leaking underground
5 storage tank program.

6 MR. THOMAS: And for these
7 analytes that come across your desks
8 that are unachievable, why wouldn't
9 there be a recommendation by the Agency
10 to add an ADL for those compounds
11 instead of have it continually be
12 something that has to be modeled by the
13 engineer and explained in a report. If
14 it's not analytically achievable by the
15 analytical community, why go through
16 this procedure and is that procedure
17 that you're using defined?

18 MR. HORNSHAW: I'm not sure I
19 follow the question.

20 HEARING OFFICER MCGILL: It was
21 sort of a compound question. Maybe you
22 could break it down.

23 MR. THOMAS: First question, is
24 that procedure that you just stated

1 defined? Is it clear in the
2 regulations that this is how one would
3 deal with a compound that is not
4 achievable?

5 MR. DUNN: In TACO you have to
6 meet the objective setting already set
7 in the regulation. I don't believe
8 that there is any set -- anything set
9 in TACO that says well, if you exceed
10 -- well, if you exceed an objective you
11 have to determine how to address it and
12 I think TACO does state that out. The
13 Agency or at least the site remediation
14 program and the leaking underground
15 storage tank program have come to the
16 conclusion you have to address it,
17 whether it be through modeling or the
18 use of barriers. It's probably spelled
19 out in TACO through the regulation.

20 MS. GEVING: I have a clarifying
21 question. This is Kim Geving for the
22 record.

23 In an instance where
24 something is not readily achievable,

1 would that be an instance that would
2 move a remediation applicant into a
3 Tier 3 scenario or would, for instance,
4 a Tier 2 be able to address some of
5 these problems? Could you run us
6 through maybe an example of a type of
7 situation like this, please.

8 MR. RAO: Before you answer
9 that, I just had a clarification
10 question. When you say achievable, are
11 you talking about whether you're able
12 to measure it in the lab or are you
13 talking about exceedence of a TACO
14 objective?

15 MR. DUNN: Being able to measure
16 it in the lab.

17 MR. RAO: Maybe that will help
18 you address this question. He's
19 talking about the lab capabilities, at
20 what level the detection level is. I
21 think that's what he was getting at.
22 To me it seemed like you were going at
23 different perspectives.

24 MS. GEVING: You're right.

1 HEARING OFFICER MCGILL: Why
2 don't we go off the record? Thanks.

3 (Whereupon, a discussion
4 was had off the record.)

5 HEARING OFFICER MCGILL: Back on
6 the record. I think we had left off
7 with the Agency about to begin a
8 response to the last question.

9 MS. GEVING: May we have the
10 court reporter read back the last
11 question, please?

12 (Whereupon, the requested
13 portion of the record
14 was read accordingly.)

15 MS. GEVING: That's the question
16 I was looking for. I think what I'd
17 like to do is have Mr. Dunn go ahead
18 and explain how the Agency addresses
19 this type of situation.

20 MR. DUNN: Typically, when we
21 run into a compound that exceeds the
22 objective in TACO where our lab
23 performed the analytical test method in
24 accordance with the SW-846 method or

1 an analyte at the TACO -- that happens
2 quite frequently that a laboratory
3 cannot achieve the TACO objective?

4 MR. EASTEP: Was that a
5 question?

6 MR. THOMAS: Yes. Is that a
7 common practice?

8 MR. DUNN: Typically, my project
9 managers review the reports, so I'm not
10 privy to that information, whether they
11 have that, but I believe there are a
12 number of compounds and I can't
13 remember the number that are out there
14 that the labs have issues with where
15 when they analyze the compound. The
16 number they achieve is above the
17 objective in TACO. If that is the
18 case, the project managers are
19 instructed to have the consultant
20 address those compounds.

21 MR. THOMAS: If that's the case,
22 then why not propose an ADL for those
23 compounds so that it's no longer an
24 issue needing to model, needing to do

1 all this other justification from the
2 engineering side? If it's not
3 achievable analytically, why not create
4 an ADL for that?

5 MR. HORNSHAW: Let me start out
6 answering that one by what my unit's
7 experience is. My unit gets the Tier
8 3s. The bureau of land reviews the
9 Tier 2s, the modeling ones and then we
10 get the ones that take care of
11 everything else and when we have that
12 problem almost always it's because the
13 sample that was being analyzed is dirty
14 and there are interferences that
15 require the detection limit to be
16 raised.

17 Now, if it's a problem with
18 a detection limit that's elevated
19 because of interferences, I don't
20 believe that qualifies for what you're
21 talking about. If it's truly a problem
22 with the lab not being able to achieve
23 detection limits in a quote, unquote,
24 clean sample, then maybe that should be

1 addressed. Maybe if you would give us
2 an example where you have problems,
3 then that would kind of clarify it for
4 us, a chemical that you see as having a
5 detection limit that doesn't match with
6 what's in TACO.

7 MR. THOMAS: That information
8 has been presented to the Agency over
9 the last several years and that's why
10 we're surprised it's not in the current
11 revision. So that's why I'm trying to
12 understand why it wasn't included. I
13 thought that information was presented.
14 We'll be happy to provide that
15 information through this process.

16 MR. KING: To make sure what you
17 presented or talked about, you're
18 talking about a chemical that you
19 cannot achieve the ADL in a clean
20 matrix?

21 MR. THOMAS: Correct.

22 MS. GEVING: Mr. Thomas, is it
23 possible that you could present some
24 testimony or some alternative

1 suggestions at the next set of hearings
2 that we could consider?

3 MR. THOMAS: Yes. And one of
4 the things, maybe for the Board's
5 benefit I'd like to try to explain, I
6 think what's happened with the TACO
7 regulation is a lot of people have
8 gotten used to how to work around some
9 of the things that are not clear.

10 In the analytical laboratory
11 industry we usually like things to be
12 very specific. We want you to use this
13 method. We want you to achieve this
14 detection limit. In some cases, the
15 Agency has evaluated some of these
16 compounds and determined that they
17 cannot be met analytically and in that
18 case they've assigned ADLs. Some of
19 the ADLs that have been assigned are
20 higher than what the analytical lab
21 community can achieve and in other
22 cases there's compounds that the --
23 using the methods again that are
24 specified for soil in most cases and

1 then for groundwater, some of those
2 analytes are unachievable using
3 conventional methods that are used by
4 environmental labs every day.

5 There are methods that exist
6 in USEPA that have supersensitive
7 detection limits. However, the cost of
8 using those methods is very high.

9 One of the analytes, for
10 example, that we cited is
11 Pentachlorophenol. Pentachlorophenol
12 is an analyte that is listed as a
13 carcinogen. It's an analyte that does
14 not include an ADL, but most
15 laboratories that are running the
16 conventional method, in this case 8270
17 is the SW-846 method, that that method
18 just simply cannot meet the
19 pentachlorophenol limit, so we report a
20 higher value.

21 There's other methods that
22 exist, for example, method 8151, which
23 is an SW-846 method, a separate
24 technique, that can be used if we

1 needed to get pentachlorophenol down to
2 the TACO objective, but as an industry,
3 again, there's been a -- seems to be a
4 work around. The modeling concept is
5 something that a lot of laboratories
6 really don't understand and the
7 question as to why doesn't a laboratory
8 need to meet pentachlorophenol at the
9 TACO objective, why is it okay to model
10 that out, is more of an engineering
11 question and maybe a good decision from
12 the engineering side of things, but
13 from the analytical side of things, if
14 it's not achievable at the objective
15 that's being specified, we would like
16 that to be clear. We would like there
17 to be some ADL or some other
18 acknowledgment that this is the TACO
19 objective, here's the method reference,
20 but we understand you may not need to
21 get down that low, the engineer can
22 model that out or do whatever they need
23 to to compensate for that analytical
24 limitation.

1 So, again, I don't quite
2 know exactly where the best place is to
3 make these changes. I personally
4 believe that TACO should either include
5 ADLs for various programs. For
6 example, the ADLs for soil should be
7 specified for a soil sample and an ADL
8 for groundwater should be a groundwater
9 sample and the method should reflect
10 that, not drinking water methods
11 applying to a soil sample. It's
12 totally inappropriate to do that
13 analytically.

14 So our association is
15 trying to evaluate whether we want to
16 submit a proposal that would include
17 ADLs for each analyte that we think
18 needs to be changed in TACO or to make
19 those recommendations at a program
20 level. So since we're here to talk
21 about the TACO objective, that's where
22 we're probably going to land. I don't
23 know if that's something that would
24 cause more problems.

1 Again, my question, back to
2 it, why is it okay that you have to --
3 you don't have to meet a
4 pentachlorophenol objective, but you
5 have to meet a benzo (inaudible)
6 objective? That I never understood. I
7 don't know that most of the laboratory
8 community understands that, but if it
9 would make it easier for everyone
10 involved, our association can provide a
11 proposal to say here's the ADL we
12 recommend for these compounds.

13 HEARING OFFICER MCGILL: Let me
14 just note for the record Board member
15 Nicholas Melas has joined us and I'll
16 also mention that at the end of today's
17 hearing we will be establishing a
18 prefiled testimony deadline for the
19 second hearing.

20 Any further questions from
21 you, Mr. Thomas, at this point?

22 MR. THOMAS: No.

23 HEARING OFFICER MCGILL: Did
24 anyone present have any questions for

1 Mr. Thomas? There's two Agency
2 witnesses who have questions.

3 MR. HORNSHAW: I'd just like to
4 make a couple clarifying statements.

5 Mr. Thomas stated that we
6 shouldn't be using a drinking water
7 method for a soil sample, but there is
8 a reason to do that. When you're
9 having a lechate test be the
10 determination of a soil objective,
11 that's for the inorganics, most of them
12 can be achieved by showing that the
13 leachate test meets the groundwater
14 objective. So in that case a water
15 objective is appropriate for a soil
16 sample.

17 Regarding technology
18 availability, when we proposed the
19 objectives for the pHs in the original
20 TACO, the groundwater objectives were
21 based on drinking water -- I'm sorry,
22 the soil objectives were based on the
23 values that -- detection limits that
24 were available then from method 8310

1 and at that time -- that point in time
2 method 8310 was not available from a
3 lot of labs, but since we specified
4 that as the most appropriate way of
5 showing that the chemical is there or
6 not there, then the labs did adopt
7 method 8310 fairly widespread. I don't
8 know what the economics of that is, but
9 in that case we kind of forced the
10 technology to catch up with the
11 detection limits.

12 MR. THOMAS: And that's a very
13 good point. I tried to say something
14 similar in that one could probably
15 achieve every single TACO objective
16 that's listed in there now without an
17 ADL using a variety of different
18 methods. It would also cost \$10,000 to
19 analyze one sample because you'd be
20 using the most sensitive equipment and
21 I think you'll find, we did some
22 research on this and we're happy to
23 provide more testimony at the next
24 hearing, but most of these methods that

1 would be necessary to achieve the
2 limits that are SW-846 methods that are
3 referenced in TACO, there are no labs
4 accredited for those. So that's
5 something that if -- a lab has to be
6 accredited according to SRP and LUST in
7 order to submit data to the Agency. So
8 just because there are methods that are
9 -- that exist, I think you'll find a
10 lot of laboratories may not have those
11 accreditations or the equipment or they
12 may have the equipment, but they're not
13 validated for that type of situation.

14 I also disagree that a
15 drinking water method is applicable for
16 a leachate. It's not at all applicable
17 for a leachate. Just because it's an
18 aqueous matrix does not necessarily
19 mean that a drinking water method is
20 the right method and, again, as I
21 mentioned earlier, SW-846 does include
22 factors for dealing with groundwaters
23 and deal with other things. A
24 detection limit should never be used as

1 a compliance objective. Again, we'll
2 go into that more when we provide
3 testimony.

4 MR. KING: I want to make sure
5 I'm understanding what you are going to
6 be coming back with. Is this going to
7 be from the association or just your --

8 MR. THOMAS: The association.

9 MR. KING: Okay. So you will be
10 identifying specific chemicals where
11 you believe the ADL is not appropriate
12 as it's stated in the TACO rule
13 currently?

14 MR. THOMAS: Correct, either not
15 existent or not appropriate.

16 MR. KING: And then you'll be
17 providing an explanation of why you
18 think that ADL should be there or be
19 changed from what it is now?

20 MR. THOMAS: Yes.

21 MR. KING: And then that will be
22 part of your prefiled testimony before
23 the next hearing?

24 MR. THOMAS: Yes.

1 HEARING OFFICER MCGILL: Yes,
2 sir. If you could state --

3 MR. WALTON: I'm Harry Walton.
4 I'm chairman of the site remediation
5 advisory committee and I also represent
6 the Environmental Regulatory Group and
7 have participated in all of these
8 rulemakings in regard to TACO and SRP.
9 I'd like to ask Mr. Thomas a question
10 relative to his understanding. What
11 are the goals of -- how important is a
12 remedial objective to the remedial
13 applicant's role with the release?
14 Does he need a definitive number that
15 he can achieve to get a release from
16 the state for that compound?

17 MR. THOMAS: When you're saying
18 a release from the state, can you be --

19 MR. WALTON: When you get an NFR
20 letter from the State of Illinois, no
21 further action letter, that is a letter
22 that the state issues to a remedial
23 applicant that says he has satisfied
24 all obligations for those contaminants

1 that are identified in the remediation
2 site and that also states that the
3 contaminants achieve a concentration
4 and a receptor. That's a critical
5 point of TACO that you demonstrated
6 through your efforts that the
7 concentrations are acceptable for
8 exposure to a receptor.

9 HEARING OFFICER MCGILL: I'm
10 sorry. Could you state your question
11 or I'm going to have to swear you in?
12 Why don't you state your question for
13 the witness and then if you want to
14 provide testimony, we'll swear you in.
15 Let's swear you in.

16 (Whereupon, Mr. Walton was
17 sworn in by the court
18 reporter.)

19 MR. WALTON: My comment is, the
20 remedial applicant when he gets a
21 release from the State of Illinois he
22 wants a number, a target, that gives
23 him (inaudible) now and in the future
24 that remedial objectives are such that

1 the receptor is not exposed to a risk.
2 We have a lot of tools, Tier 1, look up
3 tables, Tier 2, we go to site specific
4 issues. The issue he is talking about
5 is routinely handled through Tier 2s,
6 especially for the soil and
7 groundwater. The Tier 2 numbers are
8 typically much higher and if that's a
9 problem then you go to Tier 3. I would
10 request that you, when you offer your
11 testimony, factor in the policy and the
12 intent of the release that the remedial
13 applicant wants from the state. We get
14 a number -- an ADL that's too high we
15 will not have a definitive -- we will
16 not have a level of assurance that the
17 objectives are such that there's is no
18 risk to a receptor. That's it.

19 HEARING OFFICER MCGILL: Thank
20 you.

21 MR. THOMAS: If I could respond?
22 From the laboratory perspective, again,
23 what we would like to see from this
24 regulation and any regulation that

1 affects environmental laboratories is
2 it to be very specific on what is --
3 what you want from us, what method
4 you'd like us to analyze, what type of
5 detection limit you'd like us to
6 achieve. Very simple questions. We're
7 analytical people. We like it to be
8 very black and white.

9 What we propose to present
10 in testimony would be what is
11 achievable currently for these target
12 TACO compounds. I don't know and I
13 haven't -- the engineering customers
14 that use laboratories, they take it to
15 the next level of taking our data and
16 applying it and presenting it to the
17 Agency, but it seems only logical to me
18 that if an objective cannot be achieved
19 analytically that it would be specified
20 somehow in either the program or in
21 TACO that this is the case and if it is
22 important that that analyte be achieved
23 analytically for some of the cases
24 you're mentioning, then specify the

1 method to be used in order to achieve
2 that and the entire laboratory industry
3 will then start using that method and
4 achieving that limit, but right now we
5 have a situation in this industry that
6 most, if not all, laboratories are
7 using methods that cannot achieve all
8 of the, in most cases, the SRP target
9 compounds at the TACO objective. It's
10 routine. It happens every day in every
11 lab. Just make it clear, what do you
12 want from the laboratories. That's
13 what we would like to see in TACO.

14 HEARING OFFICER MCGILL: Okay.
15 Thank you.

16 Any other questions at this
17 point for any of the witnesses who have
18 testified so far?

19 Seeing no further questions
20 from members of the public or
21 otherwise, why don't we go off the
22 record for a moment?

23 (Whereupon, a discussion
24 was had off the record.)

1 HEARING OFFICER MCGILL: Back on
2 the record.

3 At this point the Board
4 would like to proceed with some of the
5 questions it has for the Agency's
6 witnesses and mindful that some of the
7 witnesses may need to leave sooner than
8 others, we're going to ask a question
9 initially here for Mr. Hornshaw,
10 although I suspect this will end up
11 being a question for the lawyers, but
12 it does come up in your testimony so
13 I'll pose it to the panel.

14 Your testimony notes that
15 the Agency proposes to incorporate
16 USEPA's SW-846 by referring to a web
17 site rather than to a date certain
18 document. Your testimony recognizes
19 that the Illinois Administrative
20 Procedure Act requires a date certain
21 reference. The Agency requests that
22 the Board make a special exception here
23 and my question is is the Agency aware
24 of any authority for making that

1 exception?

2 MR. HORNSHAW: On advice of
3 counsel, no, we're not.

4 HEARING OFFICER MCGILL: Okay.

5 We have some technical
6 questions for you actually. I don't
7 know if anyone else wanted to take a
8 stab at that question or at least take
9 that under consideration for the next
10 hearing.

11 We'll proceed with some
12 technical questions that we had
13 regarding your testimony, Mr. Hornshaw.

14 MS. LIU: Good morning,
15 Mr. Hornshaw. Following up on the
16 hearing officer's question, in your
17 prefiled testimony on page eight you
18 indicate that the Agency is proposing
19 to make this change, but I didn't find
20 the actual change in the statement of
21 reasons in the proposed language made
22 there and I was wondering if that was
23 an oversight? Your change specifically
24 deleted the reference to April 1998,

1 added update 2 and 2B and the words
2 available at the web site address for
3 the EPA.gov, but I didn't see those
4 revisions made in the proposal.

5 MR. HORNSHAW: I believe that
6 was an oversight on our part.

7 MS. LIU: Would that be
8 something that might show up in errata
9 sheet three?

10 MR. HORNSHAW: Yes, it would.

11 MS. GEVING: I'm sorry. Can you
12 tell me again specifically what we
13 missed? He was pointing to something
14 and I didn't catch the reference, the
15 exact reference.

16 MS. LIU: On his prefiled
17 testimony on page eight he indicates
18 what the proposed wording would be as
19 an incorporation by reference for the
20 test methods for solid waste.

21 MS. GEVING: Thank you.

22 HEARING OFFICER MCGILL: Then
23 you go to section 742.210(a) dealing
24 with incorporations by reference. Is

1 that where we didn't see it in their
2 proposal?

3 MR. RAO: That's correct.

4 HEARING OFFICER MCGILL: We
5 didn't see that corresponding proposed
6 change in 742.210(a).

7 MR. HORNSHAW: You mean in the
8 new version of --

9 MR. RAO: The rule language --

10 HEARING OFFICER MCGILL: Rule
11 language you're proposing. We didn't
12 see a reference in the proposed
13 language. We just saw the reference in
14 your testimony.

15 MR. RAO: And also, you may want
16 to take a look at the Agency's web
17 site, which has a more recent version
18 of SW-846 and see whichever version you
19 want us to incorporate by reference.

20 HEARING OFFICER MCGILL: Can we
21 proceed then? Do you have any
22 follow-up questions?

23 MS. GEVING: You can proceed.

24 HEARING OFFICER MCGILL: Thanks.

1 MS. LIU: Continuing along that
2 same vain, I can understand you wanting
3 to defer to the most recent updates
4 that are out there available on the
5 internet, but even in the proposed
6 citation that you provide for the
7 incorporation by reference the latest
8 update is still only 3A, although the
9 date certain has been removed. If a
10 final update four perhaps were to be
11 issued some time in the future, are you
12 envisioning it automatically be
13 included in that incorporation by
14 reference merely because you cited to
15 the web address?

16 MR. HORNSHAW: Our intent was to
17 have the remedial applicants going to
18 the web site and using the most recent
19 version of SW-846 that is on their web
20 site at the time they're doing their
21 work. So the answer, I guess, is yes.

22 MS. LIU: Just out of curiosity,
23 how often are updates made? The last
24 one is referenced 1998.

1 MR. HORNSHAW: I'm probably not
2 the right person to answer this.
3 Somebody from our division of
4 laboratories could probably answer that
5 better.

6 In my experience it's been a
7 little bit sporadic. Some years
8 nothing is updated and maybe something
9 else would get updated in the following
10 year. Do you want to try that?

11 HEARING OFFICER MCGILL: I'll
12 just remind you you're sworn in.

13 MR. THOMAS: SW-846 it is not
14 updated on a regular basis. It is very
15 sporadic. There is a trend to not be
16 issuing as many updates. I would say
17 probably every three years a new method
18 would come out, but that doesn't
19 necessarily mean that each method is
20 updated every three years.

21 MS. LIU: Since TACO seems to be
22 updated every few years anyway because
23 of other changes, would it be
24 appropriate to just defer the SW-846

1 updates to the time when you're simply
2 updating the other TACO --

3 MR. HORNSHAW: Instead of having
4 the remedial applicant go to the web
5 site and get the most recent?

6 MS. LIU: My concern is about
7 perhaps having laboratories being
8 required to use a new method when it
9 might not be in a statute or in the
10 regulations.

11 MR. HORNSHAW: I think the way
12 we should do it is to cite the most
13 recent one at the time TACO is amended
14 and then the next amendment go to
15 whatever is current at that time.

16 HEARING OFFICER MCGILL: Thank
17 you.

18 MR. RAO: I have a bunch of
19 questions that were kind of triggered
20 by Mr. Eastep's testimony, but I think,
21 Dr. Hornshaw, you may also pipe in when
22 it touches on risk assessment and
23 things like that.

24 Under the current

1 regulations, the use of area background
2 as remediation objectives as provided
3 under part 742 subpart D which sets out
4 the procedures for determining area
5 background and also it lists certain
6 limitations on the use of area
7 background. Could you, please, clarify
8 whether it's the Agency's intent to
9 allow the use of area background for
10 the proposed polynuclear aromatic
11 hydrocarbons in accordance with subpart
12 D.

13 MR. EASTEP: No applicant would
14 be prohibited from using area
15 background if they wished to and, in
16 fact, I think some people have used the
17 area background provisions to determine
18 objectives, but our intent here was to
19 do the PNAs similarly to how we handled
20 arsenic a few years ago, was to go in
21 and instead of -- we thought it would
22 be a lot simpler assistance we know
23 that there is a certain background
24 concentration out there, these various

1 PNA chemicals, that they would simply
2 go into the tier tables, look at the
3 footnote and if they qualified then
4 they would be automatically able to use
5 that background number and the reason
6 why was it -- originally we never
7 anticipated that we would have
8 background levels that were naturally
9 occurring that were higher than the
10 risk based objectives, which sort of
11 put people behind the eight ball, so to
12 speak, when they went out and there was
13 absolutely no reason for arsenic a
14 couple of years ago or PNAs now to be
15 there and all of the sudden they're
16 there and they haven't been contributed
17 to by the applicant then how do they
18 address this and so that's why we did
19 it in the objectives.

20 MR. RAO: Under subpart D in
21 section 742.405(b) -- do you have --
22 it's not part of the proposal. I'm
23 looking at the current regulations for
24 TACO.

1 HEARING OFFICER MCGILL: If you
2 need a copy, we have a copy here.

3 MR. EASTEP: We've got it here.

4 MR. RAO: Under 742.405 sub
5 section B, which describes different
6 approaches for determining area
7 background, under (b)(1) the rules list
8 the concentrations of inorganic
9 chemicals in background soils in
10 appendix A, table G. Do you think a
11 similar provision should be included
12 for the proposed PNAs also in the rules
13 part of the TACO instead of just having
14 it in a footnote in a table so that
15 people know where the area background
16 provisions are?

17 MR. EASTEP: This kind of goes
18 back a little bit and I recall
19 discussing that briefly internally and
20 I can't recall our exact discussions
21 now because it was so long ago, but I
22 think we put it in there, but I think
23 our feel was at the time we really
24 didn't need it. The footnoting in the

1 tables was sufficient.

2 MR. RAO: Would this be
3 something the Agency can take a look
4 and tell us whether it would be
5 appropriate to have something in the --
6 some provision in the rule which
7 directs a person using the rules to how
8 this area background provisions fit in?

9 MR. EASTEP: We'd be happy to
10 look at that.

11 MR. RAO: Also under the same
12 subpart, moving on to section 742.415,
13 which basically sets forth the
14 procedures and limitations for use of
15 area background. There are two sub
16 sections, sub section C and D, which
17 has the statutory limitations on the
18 use of area background.

19 Do those limitations also
20 apply to the use of PNAs, the proposed
21 area background for PNAs?

22 MR. EASTEP: No, they don't.

23 MR. RAO: They don't?

24 MR. EASTEP: No. We haven't put

1 them in a position to apply here
2 because we've essentially used the area
3 background as the Tier 1 objective.

4 MR. RAO: If these provisions
5 don't apply to the PNAs, as a part of
6 the Agency's evaluation of those area
7 background levels for the proposed --
8 in table -- appendix A, table H, did
9 the Agency do any evaluation to see
10 whether those area background levels
11 comply with the statutory provisions?

12 MR. HORNSHAW: Are you talking
13 about the one about acute threat?

14 MR. RAO: Yeah, both acute
15 threat and also -- yeah, mainly the
16 acute threat.

17 MR. HORNSHAW: We didn't do that
18 per se, but since so many millions of
19 people are exposed to these
20 concentrations and we don't see acute
21 toxicity occurring, we just didn't
22 think it was worth doing an actual
23 calculation of what an acute threat
24 would be at these levels.

1 MR. RAO: So based on the
2 proposed levels, you're comfortable
3 that there's no acute threat to human
4 health of the environment?

5 MR. HORNSHAW: That's correct.

6 MR. RAO: Okay. Moving onto sub
7 section D, which talks about the
8 situation where the area background may
9 be higher than a remediation objective
10 for residential use. It says that the
11 property may not be converted to
12 residential use unless such remediation
13 objective is met or an alternative
14 remediation based objective is
15 determined.

16 Could you explain what this
17 alternative risk based remediation
18 objective means in this context? Is it
19 something that under Tier 3 --

20 MR. HORNSHAW: That would be a
21 Tier 2 or a Tier 3 remediation
22 objective. So what am I supposed to be
23 answering now?

24 MR. RAO: I was just asking what

1 does alternative risk based remediation
2 objective mean in the context of this
3 provision?

4 MR. HORNSHAW: That's when site
5 specific information is used to
6 calculate a Tier 2 value or risk based
7 information is used to calculate a Tier
8 3 value.

9 MR. RAO: In the list of PNAs
10 for which area background has been
11 proposed, are you aware if any of those
12 PNAs or carcinogens are similarly
13 acting substances?

14 MR. HORNSHAW: Yes. Seven of
15 them are carcinogens.

16 MR. RAO: Has the Agency taken
17 into consideration whether the levels
18 that they propose are consistent with
19 the risk levels -- the acceptable risk
20 levels in section 58 --

21 MR. HORNSHAW: Yes. We did look
22 into that and the sum of the risk -- or
23 the background based value still falls
24 within the risk range that's acceptable

1 for TACO. It's less than ten to the
2 minus four.

3 HEARING OFFICER MCGILL: I'm
4 sorry. You said less than ten to the
5 minus four?

6 MR. HORNSHAW: It falls within
7 ten to the minus four to ten to the
8 minus six risk range when you sum up
9 the risks from the seven carcinogens.

10 MR. RAO: How about for
11 residential use where ten to the minus
12 six is set as the acceptable risk
13 levels? Are any of those proposed
14 levels -- do all of those levels meet
15 the ten to the minus six for
16 residential use?

17 MR. HORNSHAW: No, they don't.

18 MR. RAO: I guess Alisa had some
19 questions about, you know, a little bit
20 more about the risk levels associated
21 with carcinogens and also about similar
22 acting substances if you want to go
23 ahead and ask them.

24 MS. LIU: Good morning,

1 Mr. Eastep. I first would just like to
2 say congratulations on your retirement
3 and for your years of service to the
4 Agency and let you know that we really
5 appreciate you being here and
6 continuing to lend your experience.

7 MR. EASTEP: Thank you for those
8 kind comments.

9 MS. LIU: Thank you.

10 This question actually can
11 go to both you and Mr. Hornshaw.

12 First of all, is there a
13 difference between a PNA and a PAH?

14 MR. HORNSHAW: No. For all
15 practical purposes, no. Some people,
16 I'm not even sure which one it is, some
17 people consider polycyclic aromatic
18 hydrocarbons to be strictly carbon and
19 hydrogen compounds, whereas polynuclear
20 aromatic hydrocarbons, PNAs, can have
21 something other than carbon in the
22 molecular background, but they're used
23 so interchangeably that effectively
24 there's no difference.

1 MS. LIU: Thank you for that
2 explanation.

3 Following on Mr. Rao's last
4 question about the cancer risk levels,
5 the acceptable levels of either one in
6 a million or one in 10,000. From what
7 I understand when you have the multiple
8 similarly acting chemicals you're
9 allowed to show a cumulative risk level
10 of ten to the minus four and Mr. Rao
11 asked is that applicable then to a
12 residential cleanup and I wasn't quite
13 clear on the answer.

14 MR. HORNSHAW: I'm not sure
15 exactly how that gets worked out, to be
16 honest. There is the prohibition in
17 the original legislation of not more
18 than ten to the minus six and I don't
19 know for sure whether that only applies
20 to an individual chemical carcinogen or
21 to the sum of all chemical carcinogens
22 for residential uses. In either case,
23 the background values for some of those
24 seven carcinogens do exceed ten to the

1 minus six.

2 You could probably read into
3 subpart D that -- it talks about
4 regulated substance of concern, which
5 means something that is known to be
6 there because of the actions of the
7 remedial applicant and if you accept
8 that these carcinogens are there
9 because of background issues, then it
10 may not be a regulated substance of
11 concern. In that case, you don't
12 really consider it as part of the
13 chemicals to be evaluated for the site.

14 HEARING OFFICER MCGILL: That's
15 an interesting interpretation. I take
16 it that by the proposed footnote in
17 appendix D, tables A and B you're
18 suggesting that the background PAH
19 value would be a remediation objective?
20 So presumably it would be considered a
21 contaminant of concern, is that
22 correct?

23 MR. EASTEP: That's correct.

24 MR. HORNSHAW: Just exactly as

1 we did with arsenic in the previous
2 update to TACO.

3 HEARING OFFICER MCGILL: I think
4 that part of our question is you now
5 have -- to take your arsenic example,
6 there's table G with arsenic and a
7 background value, but table G is
8 followed into subpart D and is still
9 subject to those protections, the
10 statutory limitations that you were
11 discussing earlier, but the way you're
12 proposing table H for PAHs, it's
13 standalone, it's not folded into
14 subpart D, area background. So that's
15 our question and it sounds like, and
16 you can certainly add to your earlier
17 responses, but it sounds like you're
18 also going to take a closer look and
19 get back to us at the second hearing as
20 well? Could we go off the record for
21 one moment?

22 (Whereupon, a discussion
23 was had off the record.)

24 HEARING OFFICER MCGILL: In

1 addition to looking at subpart D of the
2 current part 742 rules, you'll
3 obviously want to be looking at section
4 58.5 of the act that sets forth a lot
5 of the area background information
6 we've been discussing and whether you
7 think the current proposal is subject
8 to that or is it consistent with it.

9 We've got some more
10 questions for the Agency witnesses.

11 MS. LIU: Mr. Hornshaw or
12 Mr. Eastep, this question goes to
13 appendix B, table A, the Agency's
14 statement of reasons explain that there
15 are 28 chemicals that have the
16 industrial, commercial or construction
17 worker inhalation objectives more
18 stringent than the residential
19 objectives and the Agency is proposing
20 to add a footnote, footnote X, designed
21 to apply to the -- designed to apply
22 these levels to residential settings.

23 Is the intent to always
24 replace the residential remediation

1 inhalation objectives for these 28
2 chemicals with the worker objectives?

3 MR. EASTEP: Yes.

4 MS. LIU: Would there ever be a
5 scenario where there would be no
6 construction worker activity allowed on
7 a residential site?

8 MR. EASTEP: I suppose that
9 could be a condition of the NFR letter.
10 You could do that, but we tried looking
11 at different ways to put this in here.
12 I mean, it doesn't -- something just
13 doesn't standalone. If you make a
14 change here, that could impact
15 something else and I wasn't sure why we
16 didn't because we had so many different
17 scenarios. When we were trying to put
18 this together it wasn't just as simple
19 as well, you might have a residential
20 scenario where somebody could come in
21 and have a contractor there putting in
22 a sewer line or something that might be
23 exposed to this because we have a lot
24 of people, and I won't say it's the

1 rule, but it's very common where in an
2 industrial setting just to protect
3 themselves and their liability and to
4 ensure it's cleaned up better will
5 actually clean up to some residential
6 level. Well, you're much more likely
7 to have construction activities at an
8 industrial site. So we kind of
9 grappled with how to put that in and
10 how to make it meaningful and we just
11 don't know because it's voluntary and
12 people have the option of doing either
13 -- and, of course, you do find
14 situations where, you know, maybe
15 they're used as an industrial setting
16 and they decide to sell the property
17 and convert it to townhomes or
18 something like that. We've seen that.

19 MR. HORNSHAW: And one other
20 thing I'd like to add is even if you
21 were able to put in a sentence that
22 prohibits construction work in an NFR
23 letter the construction worker scenario
24 was always intended to include

1 emergency repair workers and you can't
2 prohibit them from working on a site.

3 MR. EASTEP: I don't know if I
4 answered your question or not.

5 MS. LIU: I was just thinking
6 along the road someone might come up
7 with a financial incentive for not
8 wanting to go down that far and if they
9 could place an institutional control in
10 there I would think they would want to
11 do that. I was just wondering if that
12 was ever a practical scenario.

13 MR. EASTEP: I would think the
14 Agency has the authority to do that, to
15 implement some sort of an institutional
16 control that would prohibit
17 construction.

18 MS. LIU: But what if you have
19 the emergency worker situation, would
20 that contradict --

21 MR. HORNSHAW: In most cases it
22 would unless there's no utilities.

23 MS. LIU: Thank you.

24 MS. MOORE: This question is for

1 Gary King. On your prefiled testimony
2 on page two and three the section is
3 742.105(a), applicability. The Agency
4 proposes to expand part 742,
5 applicability, beyond the leaking
6 underground storage tank program, the
7 SRP and the RCRA part B permits and
8 closures.

9 What other remediation
10 programs have been using or are
11 expected to use TACO and would the
12 Agency provide, as applicable, the
13 Illinois Compiled Statutes and Illinois
14 Administrative Code citations to these
15 other programs?

16 MR. KING: One of the programs
17 that the Agency runs is dealing with
18 emergency responses. We have an office
19 of emergency response and they really
20 -- they don't have a specific set of
21 program rules that determine their
22 procedural requirements for making
23 decisions. However, you do end up with
24 -- there will be situations where

1 persons who are doing an emergency
2 response want to have a remediation
3 objective relative to that emergency
4 response. So that's an example of one
5 of the programs that isn't really
6 referenced -- it doesn't have a set of
7 procedural rules that are already in
8 the Board rules.

9 MS. MOORE: Any other programs
10 that you're aware of just by -- just as
11 a matter of practice?

12 MR. KING: Another program would
13 be the -- we work with the Federal
14 Superfund program. The TACO
15 procedures, they are not considered an
16 ARAR (phonetic) for purposes of CERCLA,
17 but they are still something that are
18 called a to be considered. So that is
19 a -- TACO can be used by people in
20 Illinois who are doing cleanups under
21 CERCLA, looking at it as a reference
22 document and, again, there's not a set
23 of Board rules that guides how the
24 Federal Superfund programs operate.

1 MS. MOORE: Is there then
2 something in the Illinois Statute that
3 allows that?

4 MR. KING: No. That would be a
5 matter of procedures under the federal
6 rules that govern the Superfund program
7 in that instance.

8 HEARING OFFICER MCGILL: I guess
9 a follow-up question is, do you think
10 it's consistent with Title 17 of the
11 act to expand TACO to these other
12 programs you have in mind?

13 MR. KING: I think it's
14 appropriate because we have, for
15 instance, in the private world many
16 cleanups are performed in which the
17 Agency doesn't have any oversight
18 responsibilities and yet -- you know,
19 so what do people in the private sector
20 who are dealing in a private
21 transaction, they are not coming to the
22 agency for oversight, where do they
23 look to figure out what remediation
24 objective should be used. They

1 generally looked to TACO and so it's --
2 it's a reference that allows it, I
3 think, a problem.

4 HEARING OFFICER MCGILL: That
5 example that you just gave, again, I'm
6 looking at your proposed language --

7 MR. KING: Maybe that one
8 doesn't exactly fit the language there
9 because it does say under one of
10 Illinois EPA's remediation programs.
11 So it might not be quite as direct
12 there.

13 HEARING OFFICER MCGILL: I guess
14 it would be helpful -- this is just
15 such an open-ended reference in the
16 proposed language to IEPA remediation
17 programs, if you could let us know
18 everything you have in mind. You've
19 given us a couple of examples, the
20 federal CERCLA sites and emergency
21 response and that's helpful. If other
22 examples occur to you that you could
23 share with us later or at the next
24 hearing, it would just help us

1 understand where these Board rules are
2 intended to be used or have been used
3 in practice and how you want to codify.

4 MR. KING: Now, a number of
5 those -- so a number of those will not
6 be cited to specific Board rules. The
7 issue is you want to know what kind --
8 what the programs are regardless of
9 whether there's a Board procedural rule
10 that guides it along?

11 HEARING OFFICER MCGILL:
12 Exactly. If there is an Illinois
13 Compiled Statute site or an Illinois
14 Administrative Code site for that
15 particular program, that would be
16 excellent, but if there isn't, we'd
17 still like to know what those programs
18 are.

19 MR. KING: We certainly can do
20 that.

21 HEARING OFFICER MCGILL: Just so
22 Mr. Clay doesn't feel neglected, I
23 wondered if we should, in light of the
24 pending R04-23 rulemaking and Public

1 Act 92-554, I believe it is, should the
2 TACO rules where we site to part 731
3 and 732 UST rules now also include a
4 reference to part 734?

5 MR. CLAY: Yes, they should.

6 HEARING OFFICER MCGILL: Okay.

7 Thank you.

8 This is a question for
9 Mr. King. Your prefiled testimony
10 discusses the proposed form documents
11 in appendices D through I. Who would
12 the Agency expect to be completing
13 these forms? Would it be an
14 environmental consultant for a client?
15 Take the first example, I think
16 appendix D is a highway authority
17 agreement and then there's a memorandum
18 of understanding.

19 There are several legal
20 document forms that are now being
21 proposed and am I correct that the
22 proposal that those forms would be
23 mandatory, all but the ordinance, I
24 believe, is that correct?

1 MR. KING: Some would be
2 mandatory, others would not be
3 mandatory. I think how it's cross
4 referenced in the rule depends on
5 whether it's mandatory or not. You
6 know, I guess there could be a debate
7 between engineers and lawyers as to
8 whether this is -- filling out one of
9 these forms is the practice of law. I
10 really don't -- authorized practice of
11 law. I don't particularly want to be
12 involved in that debate, but I think we
13 certainly have had these agreements
14 prepared by lawyers and by non-lawyers
15 I think over the course of the
16 administration of our programs.

17 HEARING OFFICER MCGILL: Did the
18 Agency receive any input from any of
19 the bar associations or ARDC about
20 these forms -- proposed forms?

21 MR. KING: When we had meetings
22 with the site remediation advisory
23 counsel, as we generally have done with
24 the TACO rules, there are environmental

1 attorneys who are on that -- part of
2 that, so they did review these -- this
3 proposal and I presume they may have
4 looked at that issue. I'm not sure.
5 There certainly -- as this was
6 distributed to the -- to SRAC for their
7 comment and discussion with us, I know
8 that they, as an internal process, sent
9 our proposal out to a fairly widespread
10 group that would have included
11 attorneys working within -- for private
12 companies who would have looked at
13 this. We did not transmit anything
14 directly to the bar association.

15 HEARING OFFICER MCGILL: Would
16 the Agency consider making the form
17 models as opposed to mandatory? Do you
18 think that would really lose the
19 benefit that you're seeking?

20 MR. KING: We had proposed this
21 as mandatory because of the fact that
22 we see so many of these and you really
23 would -- you begin to lose the benefit
24 if you don't have it mandatory because

1 then it's a model, now you have to --
2 well, then you have to review the --
3 what they proposed against the
4 regulations, et cetera, et cetera. It
5 makes the process of review more
6 complex.

7 We felt we're at a point
8 that the model documents had been used
9 enough by the private sector and by the
10 Agency that we've been able to flush
11 out issues that were important so that
12 they could go in as a model that would
13 be mandatory in certain instances.

14 HEARING OFFICER MCGILL: It
15 would help -- if you mentioned SRAC,
16 site remediation advisory committee,
17 was created when Title 17 came about
18 and maybe for the next hearing you
19 could just tell us what the makeup of
20 SRAC is -- who --

21 MR. KING: Mr. Walton is
22 chairman of SRAC

23 HEARING OFFICER MCGILL: You're
24 still sworn in, so could you just tell

1 -- the Agency has represented in their
2 proposal that they've gotten input from
3 SRAC and that SRAC -- that you've
4 circulated various versions of their
5 proposal, I guess.

6 MR. WALTON: Yes, we have and we
7 concur with using these forms.

8 HEARING OFFICER MCGILL: Could
9 you tell us what the makeup of the site
10 remediation advisory committee is.

11 MR. WALTON: They are
12 representatives from the state chamber,
13 representatives from the IMA, chemical
14 industry counsel, he's a lawyer, two
15 banking groups, realtors, then ERG, the
16 environmental regulatory group,
17 basically provides a support staff for
18 that and in this rulemaking, Hodge,
19 Dwyer, Zeman, that's their legal
20 counsel for ERG, and then we have a
21 number of lawyers that provide support
22 to the various associations. All of
23 these people have reviewed and
24 commented on this and we've had a

1 number of meetings independent of the
2 Agency and in none of these meetings
3 did any of the various groups have any
4 problems with these documents. In
5 fact, these documents save a lot of
6 money and time for remedial applicants.
7 It provides them a very clear target of
8 what issues have to be addressed. Most
9 of the details in the agreements are
10 very technical. They go to the nature
11 of the contaminants, the extent of the
12 contaminants, types of barriers, legal
13 strategies that were used to resolve
14 the issues at the site. Again, it's a
15 very technical legal document, but the
16 legalities comes from the issuance of
17 the state of Illinois and the
18 acceptance by the property owner and
19 all of those parties have their own
20 representation on these issues.

21 HEARING OFFICER MCGILL: Thank
22 you.

23 MS. LIU: Good afternoon,
24 Mr. King. I have one very simple

1 question.

2 On page seven of the
3 statement of reasons the Agency
4 proposal for appendix A, table G
5 indicates that a footnote is proposed
6 to be removed, but I didn't notice it
7 in the actual proposal. I was
8 wondering if you could shed some light
9 on that.

10 MR. KING: You said page seven
11 of the statement of reasons --

12 MS. LIU: Appendix A, table G.

13 MR. KING: The letters here are
14 so small. I'm trying to see whether I
15 can see whether there's a strike
16 through it. I can't. Yeah. I guess
17 if you look real closely there's a
18 strike through on just the footnote,
19 not the text of the Board note, just
20 the cross reference --

21 MS. LIU: Thank you. I see it.

22 MR. KING: This is
23 non-substantive. This truly fits that
24 category.

1 MS. LIU: Thank you.

2 MS. GEVING: So, in other words,
3 our intent was to leave the Board note
4 intact, but to just delete the footnote
5 itself?

6 MR. KING: That's correct.

7 HEARING OFFICER MCGILL: And
8 that's a tiny A?

9 MS. GEVING: It's a very tiny A.

10 MR. KING: A very tiny A with a
11 tiny slash mark.

12 HEARING OFFICER MCGILL: While
13 we're on the subject. Current table H
14 is going to become table I as proposed.
15 I think it's getting displaced by the
16 new PAH table. There are references in
17 the current rules to table H, but those
18 were not proposed to be changed to
19 table I on the Agency proposal. It may
20 just be a matter of doing an electronic
21 search in the part 742 rules, but as an
22 example in 742.505 and 742.805 there
23 were some references to table H and I
24 just want you to consider whether that

1 should become table I.

2 MS. GEVING: The answer would be
3 yes. That's an oversight on the
4 Agency's part. I apologize.

5 HEARING OFFICER MCGILL: No
6 problem.

7 One last question, I don't
8 expect a response to this, it's mostly
9 for Kim. The Illinois Administrative
10 Procedures Act was amended fairly
11 recently and it requires that first
12 notice publication in a rulemaking
13 describe any I'll quote, I'll give you
14 the citation, quote, published study or
15 research report used in developing the
16 rule, among other things. That is at
17 section 5-409(b)3.5 of the IAPA and
18 it's in the Board's procedural rules at
19 102.202(b) and we would just ask if you
20 could supply us with the Agency's
21 response to that. It's something that
22 the Board would have to complete for
23 first notice publication of the
24 Illinois Register, identifying any such

1 published studies or reports that were
2 used in developing the rule. It's
3 something that we have to do now in all
4 of our rulemakings.

5 MS. GEVING: Are you asking for
6 new studies that we've relied on or
7 everything in the rule --

8 HEARING OFFICER MCGILL: Just to
9 -- I'm sorry. Could you repeat your
10 question?

11 MS. GEVING: Is it everything
12 that is in the rule currently that
13 existed before this amendment or just
14 new things that we're putting in that
15 we relied on?

16 HEARING OFFICER MCGILL: Just
17 for this rulemaking proposal. Do you
18 want to answer that now?

19 MS. GEVING: Well, I'd have to
20 go through the incorporations by
21 reference probably one-by-one, but I
22 can tell you that both PNA studies were
23 included in that.

24 HEARING OFFICER MCGILL: I would

1 imagine so. If there's anything else
2 you want to add to that you can do that
3 in prefiled testimony or at hearing.

4 Is there anyone else who
5 wishes to testify or pose any questions
6 today at this point? Mr. Thomas?

7 MR. THOMAS: I just have one
8 follow-up question. Mr. King had made
9 a couple of comments that triggered
10 these questions about the incorporation
11 by reference and other programs using
12 TACO.

13 My first question is with
14 regard to incorporation by references.
15 One of the ASTM methods specifically
16 referenced in the incorporation by
17 reference section, however, SW-846 is
18 referenced as an overall incorporation,
19 that document is about this long, it's
20 a huge document. Could the methods be
21 specified in there instead of the
22 entire manual? There's a lot of things
23 in there that have no applicability at
24 all to TACO.

1 HEARING OFFICER MCGILL: Could I
2 just make sure I understand your
3 question. You're asking for more
4 specific identification of test methods
5 within SW-846 as opposed to just
6 referring generally to SW-846?

7 MR. THOMAS: Yes.

8 HEARING OFFICER MCGILL: I think
9 I understand the question. Does the
10 Agency care to respond to that at this
11 point.

12 MR. HORNSHAW: I'm not sure why
13 you'd want to do that because if there
14 is a chemical that -- if you specify
15 just individual methods, there may be
16 reason to go to a different method to
17 obtain a detection limit for a specific
18 compound that would be of concern to us
19 and if you haven't got that method
20 specified in the current version of
21 TACO, you wouldn't be able to use it, I
22 think.

23 MR. RAO: Would there be also a
24 possibility that a chemical that's not

1 listed in one of the appendix tables
2 may be encountered at one of these
3 sites for which --

4 MR. HORNSHAW: That happens all
5 the time and that's why I'm making the
6 comment that I am.

7 MR. THOMAS: That's kind of the
8 purpose for the request, is that there
9 are methods that -- for one thing,
10 there's no one certified to perform to
11 comply with the other regulations where
12 the use of a certified lab must be
13 used, so that's why I was thinking it
14 would be much more appropriate to have
15 the actual method specified instead of
16 leaving it up to the dozens and dozens
17 of methods which no one performs. Some
18 of those methods that are listed in
19 there are completely experimental.

20 My other question is there
21 is a reference in appendix B, table B,
22 I believe, both tables for soil
23 remediation objectives there's a
24 footnote F that states the level is at

1 or below the contract laboratory
2 program required quantitation limit for
3 regular analytical services. That
4 particular reference is not in the
5 incorporation by reference. So I would
6 ask that that -- whatever that is be
7 specified in the incorporation by
8 reference.

9 HEARING OFFICER MCGILL: Could
10 you identify again the appendix and the
11 table?

12 MR. THOMAS: Appendix B, table
13 B. I believe it's also in table A, but
14 I am looking at table B. I believe
15 it's the same footnote for both. It's
16 footnote F.

17 MS. GEVING: Are you saying that
18 we don't have the method incorporated
19 in the incorporations by reference?

20 MR. THOMAS: Correct.

21 Mr. King had made reference
22 to the Superfund program. That is a
23 Superfund document, which is why I
24 believe it should be incorporated, a

1 USEPA Superfund program.

2 HEARING OFFICER MCGILL: Does
3 the Agency have anything they'd like to
4 add at this point?

5 MS. GEVING: We will take a look
6 at that before the next hearing.

7 HEARING OFFICER MCGILL: And
8 certainly, Mr. Thomas, feel free to
9 include any suggestions, rule language
10 that you care to.

11 Is there anyone else who
12 would like to testify today? Anyone
13 who has any questions they'd like to
14 pose?

15 MR. WALTON: In error I didn't
16 include the Illinois Consulting
17 Engineering Counsel as a member of SRAC
18 and they'd kill me if I didn't mention
19 them.

20 HEARING OFFICER MCGILL: We
21 wouldn't want that. Why don't we go
22 off the record for a moment?

23 (Whereupon, a discussion
24 was had off the record.)

1 HEARING OFFICER MCGILL: Just a
2 few procedural items before we adjourn.

3 I'll note that anyone may
4 file written public comments on this
5 rulemaking with the clerk of the Board.

6 The second hearing is
7 scheduled for March 1 starting at
8 10:30. It will be held in the IEPA
9 building, the north entrance, TQM room,
10 that's 1000 East Converse in
11 Springfield.

12 Prefiled testimony for the
13 second hearing must be filed with the
14 clerk of the Board by February 22.

15 The mailbox rule does not
16 apply to this filing. So the clerk
17 must receive the prefiled testimony by
18 that date, that's Wednesday the 22nd.

19 The current notice and
20 service list are located by the
21 entrance to this room. There are also
22 sign-up sheets if you would like to be
23 added to either of those lists.

24 Persons who are on the

1 notice list receive only Board and
2 hearing officer orders. Those on the
3 service list are those who wish to
4 actively participate in this proceeding
5 and receive copies not only of those
6 orders, but also other filings such as
7 prefiled testimony and public comments.

8 Prefiled testimony and
9 public comments may be filed on-line
10 through the clerk's office on-line.
11 It's on the Board's web site. Again,
12 that's filling, that's not service.
13 You still have to serve those on the
14 service list and, please, check with
15 the Board before you do file something
16 to make sure you have the most recent
17 version of the service list.

18 We expect copies of this
19 transcript to be in the Board's offices
20 by February 10 and we will get it
21 posted on our web site shortly after
22 that.

23 Are there any other matters
24 that need to be addressed at this time?

1 Go ahead.

2 MS. GEVING: Just one quick
3 question. If we file on your on-line
4 COOL system on the 22nd, that's
5 considered meeting the filing
6 requirement, correct?

7 HEARING OFFICER MCGILL: Yes.
8 Just do so early enough in the day,
9 don't do it at 11:59 at night. I don't
10 know how our voluntary electronic pilot
11 project is working exactly, but I think
12 we need to get it before 4:30 that day.

13 Anything else? Seeing no
14 further matters I'd like to thank
15 everyone for participating today and
16 this hearing is adjourned.

17 (Whereupon, no further
18 proceedings were had.)

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1 STATE OF ILLINOIS)
2) SS.
3 COUNTY OF W I L L)

4
5

6 I, TERRY A. BUCHANAN, CSR,
7 do hereby state that I am a court reporter
8 doing business in the City of Chicago,
9 County of Cook, and State of Illinois; that
10 I reported by means of machine shorthand the
11 proceedings held in the foregoing cause, and
12 that the foregoing is a true and correct
13 transcript of my shorthand notes so taken as
14 aforesaid.

15
16

17 _____
18 Terry A. Buchanan, CSR
19 Notary Public
20 Will County, Illinois

21

22 SUBSCRIBED AND SWORN TO
23 before me this ___ day
24 of _____, A.D., 2006.

Notary Public