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

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HEARING OFFICER MCGILL: Sure. Yeah, that will not be a 1 2 problem. But go ahead, again just state your name and the organization you're representing. 3 MR. THOMAS: Jarrett Thomas with Suburban Laboratories. I 4 too would like to give a brief summary. 5 HEARING OFFICER MCGILL: Okay. Just -- And that's fine. I 6 think we may save some time with the three Agency witnesses 7 unless -- before we went on the record I was conferring with 8 9 counsel for the agency, Ms. Kim Geving, and the Agency's 10 comfortable not providing brief summaries. Is there any objection to the Agency's witnesses not running through a brief 11 summary of their testimony? Is there anyone who would rather 12 hear their summaries? Okay. Seeing no response, I think we'll, 13 14 at least with the Agency witnesses, dispense with the summaries. 15 Are there any questions about the procedures we're going to be following today? I would ask that everyone please speak up 16 17 and try not to talk over one another so our court reporter can clearly transcribe everyone's comments. 18 19 I'm going to -- At this point since the Agency witnesses are not going to be providing any summaries of their testimony, 20 what I'd like to do is take care of some paperwork here. The 21 Agency filed a Motion to Correct Portions of the Hearing 22 Transcript, the first hearing transcript, the February 21, 2006, 23

24 motion. Is there any objection to granting that motion, to

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1 corrections to the first hearing transcript? Seeing no

2 objection, I'll grant that Agency motion.

There are several proposed hearing exhibits. We had six 3 hearing exhibits from the first hearing. Now there are several 4 more Agency exhibits that are being proposed. The first is 5 Errata Sheet Number 3 from IEPA. Is there any objection to 6 entering that as a hearing exhibit? Seeing none, Errata Sheet 7 Number 3 will be Exhibit 7. Is there any objection to entering 8 into the record, as if read and made a hearing exhibit, the 9 Pre-filed Testimony of Gregory Dunn? Seeing none, I'll grant 10 that motion. That will be Exhibit 8, Pre-filed Testimony of Mr. 11 Dunn entered as if read. The next motion is for the Pre-filed 12 Testimony of Dr. Thomas Hornshaw of the Agency. Is there any 13 objection to entering that as a hearing exhibit and entering it 14 as if read? Seeing none, I'll grant that motion and that will be 15 Exhibit 9. And last, Pre-filed Testimony of Lawrence Eastep of 16 the Agency. Is there any objection to having that entered into 17 the record as if read and made a hearing exhibit? Seeing none, 18 that will be Hearing Exhibit 10. And that is entered into the 19 20 record as if read. With that, at this point what I'd like to do is open it up 21 to questions for the Agency's witnesses. I understand the Agency 22 would like to field the questions as a panel. I'm going to go 23 ahead and have the court reporter swear in the Agency's witnesses 24

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1 ILLINOIS POLLUTION CONTROL BOARD 2 IN THE MATTER OF:) 3) PROPOSED AMENDMENTS TO) 4 TIERED APPROACH TO) CORRECTIVE ACTIO) No. R06-10 5 OBJECTIVES (35 ILL. ADM.) Rulemaking-Land CODE 742)) 6 7 The following is a transcript 8 9 held in the above-entitled cause, taken stenographically before TERRY A. BUCHANAN, 10 CSR, a notary public within and for the 11 12 County of Will and State of Illinois, at 13 Suite N502, 160 North LaSalle Street, 14 Chicago, Illinois, on the 31st day of January, A.D., 2006, commencing at 10:30 15 16 o'clock a.m. 17 18 19 20 21 22 23 24

1 арреакамсе S: 2 ILLINOIS POLLUTION CONTROL BOARD, 3 100 West Randolph Street 4 Suite 11-500 5 Chicago, Illinois 60601 (312) 814-6983 б BY: MR. RICHARD R. McGILL, JR. 7 8 (HEARING OFFICER) 9 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, 1021 North Grand Avenue East 10 Springfield, Illinois 62794 11 12 (217) 782-5544 13 BY: MS. KIMBERLY A. GEVING and 14 MS. ANNET C. GODIKSEN BOARD MEMBERS PRESENT: IEPA WITNESSES: 15 Nicholas Melas 16 Thomas Hornshaw 17 Thomas Johnson Gregory Dunn Andrea Moore 18 Lawrence Eastep 19 G. Tanner Girard Douglas Clay 20 Anand Rao Gary King Alisa Liu 21 22 23

2

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
б	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.
б	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
б	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
б	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 regards to using those institutional 2 3 controls over the last eight years. 4 One of the things we 5 progressed in implementing the rule when it first came out, it was just the 6 7 rulemaking language and we learned that it would be appropriate to develop 8 9 model documents. We developed model documents over the years. We then took 10 those model documents and posted them 11 12 on our web site to make them easy to use. We now think we're at a point 13 14 where it's appropriate to codify those 15 modeled documents within the TACO rule itself. That will help in terms of --16 sometimes we've had issues come up and 17 we wanted to make sure that those were 18 clarified and that the format of how 19 those documents should be handled 20 21 should be -- place it right in the rule 22 itself. I think that concludes my 23 summary of my testimony. I'll be happy 24

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.

MR. HORNSHAW: Before I
summarize my testimony I have to
confess that it's probably my fault
primarily that we had to do errata
sheet numbers one and two. I've been
extremely busy with writing the report
that the legislature has required of us
regarding flame retardants and I didn't
get a chance to review the full copy of
TACO until very late in the proceedings
when I caught some of the typos and
things that I will be discussing, so I
confess, I was the culprit.
Regarding my testimony, it's
in four pieces basically. The first
has to do with toxicity information
that has changed from USEPA. As in the
first amendment to TACO there are a
handful of chemicals that USEPA has
updated the toxicity data. There are
six of them this time that require
changes in the Tier 1 tables. We also
learned in discussions with our
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
	because insolucories quice oreen repore
20	them. When they show up on an
20 21	
	them. When they show up on an
21	them. When they show up on an analytical sheet some people have

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
б	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

what that background was.

1

In about 19 -- excuse me. 2 3 About 1999 or 2000 we started 4 addressing the issue and we addressed 5 it really two ways. A Brownfield's grant was issued to the City of Chicago 6 7 to do a PNA background study strictly within the city limits of Chicago. We 8 9 also talked with the Electric Power Research Institute, which is a group 10 that is funded -- it's a nationwide 11 12 group funded by utilities across the country and they were also interested 13 14 in this topic and so the Electric Power Research Institute or EPRI conducted a 15 study across the state exclusive of the 16 boundaries of the city of Chicago. We 17 weren't active partners nor did we fund 18 the EPRI study, but we did work with 19 20 them throughout the process and we were 21 in constant communication and 22 consultation with EPRI. What resulted from both of 23 these studies were the identification 24

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. Additionally, many states clean up to 2 3 TACO residential objectives even though 4 the intended use of the property might 5 be industrial. In other words, they're kind of going that extra step to clean 6 7 up a little better. Therefore, in order to protect the construction 8 9 worker we felt that it was necessary to 10 apply industrial, commercial construction worker remedial inhalation 11 objectives to residential scenarios. 12 Trying to do that, there were several 13 14 options we could have looked at and we 15 felt that since there were only 28 chemicals involved, what we did was 16 footnote those 28 chemicals in the Tier 17 1 table and that footnote directs the 18 reader to apply the construction worker 19 inhalation objectives in these 20 21 particular instances. 22 That concludes my summary. HEARING OFFICER McGILL: Thank 23 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 identified in TACO right now to 2 3 determine the fraction organic carbon 4 of a site. The first one is the ASTM, 5 that's the American Society for Testing Materials method D2974 and USEPA SW-846 6 7 method 9060(a). I'm going to briefly go over the two methods. 9061(a) is a 8 9 water method. However, you can modify this method for soil. However, this 10 method had some problems. The sample 11 12 amount that you use for this method is very small, somewhere in the range of 13 14 ten to 50 milligrams and there is no standard protocol to modify this method 15 for soils. With the small sample that 16 you have to analyze for the fraction 17 organic carbon obtaining reproducible 18 results are very difficult. Method 19 9060(a) does give you a total organic 20 21 carbon number, however. Under the ASTM 22 method it produces a total organ matter concentration. This is an identified 23 method that has been widely used 24

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,
б	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). My last area is in appendix 2 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 you. Why don't we go off the record 8 9 for a second? (Whereupon, a discussion 10 was had off the record.) 11 HEARING OFFICER McGILL: The 12 Agency has concluded with its witnesses 13 14 who prefiled their testimony, so I will turn it back over to Kimberly Geving to 15 introduce the last Agency witness. 16 17 MS. GEVING: Yes. The last Agency witness is Doug Clay who is the 18 manager of the leaking underground 19 storage tank section for the Agency and 20 21 he is here for purposes of questions as 22 a panel. 23 HEARING OFFICER McGILL: Thank you. Thank you all for your testimony 24

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
б	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
б	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 reference TACO for their own specific 2 3 reasons, why wouldn't the analytical 4 requirements, detection limits and so 5 forth for those programs be specified in the program because they may have 6 7 different requirements than TACO in terms of the analytical objectives? 8 9 For example, the method references, for 10 example, TACO lists dozens of method references for drinking water, but 11 12 drinking water is not a applicable matrix when you're talking about soils. 13 14 You can't reference a drinking water 15 MDL or PQL when you're running a soil SW-846 procedure. They're completely 16 17 separate. Why does TACO include any 18 information with regards to the method 19 to be selected or the detection limits 20 21 that the laboratory needs? Shouldn't 22 that be placed in the applicable program side of the regulatory 23

24 requirements? There's a lot of things

1 in TACO that I don't understand why there's reference to SW-846 when 2 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 to this, but as I stated before, we had 8 9 to have objectives and they had to be 10 achievable. They couldn't be totally risk base because the laboratories 11 can't go as low as some of the risk 12 based values. So they had to go into 13 14 the rule. It's a one size fits all 15 rule. It applies to whatever programs are allowed to use it. It just made 16 17 sense to have them there. MR. THOMAS: Even though 18 drinking water methods are referenced 19 here and used as a guidance for some of 20 21 these ADLs, have no applicability with 22 regards to soil, groundwater that are being run primarily for TACO? 23 MR. HORNSHAW: Well, they would 24

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 storage tank regulations. 2 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 program rule should be changed in some 8 9 fashion? 10 MR. THOMAS: I don't know and that's why I'm trying to get these 11 questions answered. We've had a lot of 12 discussions in the association about 13 14 what do we suggest or what do we submit 15 to address some of these problems that the industry has been having with 16 meeting of TACO objectives and it seems 17 to be that either the program -- the 18 program itself needs to be expanded to 19 include analytical requirements or TACO 20 21 needs to be expanded to improve 22 regulatory requirements. There's a little bit of both in each regulation. 23 If the SRP and LUST and all the 24

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
14 15	remediation program at least when the project manager receives a report where
15	project manager receives a report where
15 16	project manager receives a report where we have a compound or two that exceeds
15 16 17	project manager receives a report where we have a compound or two that exceeds a remediation objective in TACO they
15 16 17 18	project manager receives a report where we have a compound or two that exceeds a remediation objective in TACO they have to address that compound one way
15 16 17 18 19	project manager receives a report where we have a compound or two that exceeds a remediation objective in TACO they have to address that compound one way or another, whether it be through
15 16 17 18 19 20	project manager receives a report where we have a compound or two that exceeds a remediation objective in TACO they have to address that compound one way or another, whether it be through modeling. If it's in the soil, they
15 16 17 18 19 20 21	project manager receives a report where we have a compound or two that exceeds a remediation objective in TACO they have to address that compound one way or another, whether it be through modeling. If it's in the soil, they can model it theoretical model to

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
б	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 whatever method is appropriate, that if 2 their number that they come up with at 3 the lab exceeds an abbreviation 4 objective, the consultant for the 5 project has to address that compound and they can do it a number of ways. 6 7 They can use barriers to exclude the route, whether it be the ingestion or 8 9 inhalation routes, they can use modeling under your Tier 2 scenario in 10 TACO to model out the compounds, 11 especially for the migration of 12 groundwater route or they can even go 13 14 under a Tier 3 scenario, this is the 15 concentration the lab could get down to under the method that's specified in 16 TACO and, therefore, we believe that's 17 a true and accurate number. So there 18 are a number of ways that we can 19 20 address that compound through TACO. 21 MR. THOMAS: I believe you 22 answered this question before, but 23 that's a common occurrence, correct, 24 that the laboratory is unable to detect

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

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
б	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 go into that more when we provide 2 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 --MR. THOMAS: The association. 8 9 MR. KING: Okay. So you will be 10 identifying specific chemicals where you believe the ADL is not appropriate 11 as it's stated in the TACO rule 12 currently? 13 MR. THOMAS: Correct, either not 14 existent or not appropriate. 15 MR. KING: And then you'll be 16 17 providing an explanation of why you think that ADL should be there or be 18 changed from what it is now? 19 MR. THOMAS: Yes. 20 21 MR. KING: And then that will be 22 part of your prefiled testimony before the next hearing? 23 MR. THOMAS: Yes. 24

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 rulemakings in regard to TACO and SRP. 8 9 I'd like to ask Mr. Thomas a question 10 relative to his understanding. What are the goals of -- how important is a 11 remedial objective to the remedial 12 applicant's role with the release? 13 Does he need a definitive number that 14 he can achieve to get a release from 15 the state for that compound? 16 17 MR. THOMAS: When you're saying a release from the state, can you be --18 MR. WALTON: When you get an NFR 19 letter from the State of Illinois, no 20 21 further action letter, that is a letter 22 that the state issues to a remedial applicant that says he has satisfied 23 all obligations for those contaminants 24

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. We have a lot of tools, Tier 1, look up 2 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 typically much higher and if that's a 8 9 problem then you go to Tier 3. I would 10 request that you, when you offer your testimony, factor in the policy and the 11 intent of the release that the remedial 12 applicant wants from the state. We get 13 14 a number -- an ADL that's too high we will not have a definitive -- we will 15 not have a level of assurance that the 16 objectives are such that there's is no 17 risk to a receptor. That's it. 18 HEARING OFFICER McGILL: Thank 19 20 you. 21 MR. THOMAS: If I could respond? 22 From the laboratory perspective, again, what we would like to see from this 23 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
б	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 the record. 2 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 others, we're going to ask a question 8 9 initially here for Mr. Hornshaw, 10 although I suspect this will end up being a question for the lawyers, but 11 it does come up in your testimony so 12 I'll pose it to the panel. 13 14 Your testimony notes that 15 the Agency proposes to incorporate USEPA's SW-846 by referring to a web 16 17 site rather than to a date certain document. Your testimony recognizes 18 that the Illinois Administrative 19 20 Procedure Act requires a date certain 21 reference. The Agency requests that 22 the Board make a special exception here and my question is is the Agency aware 23 of any authority for making that 24

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
б	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?
б	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
б	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.
б	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
б	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?
б	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 a million or one in 10,000. From what 6 7 I understand when you have the multiple similarly acting chemicals you're 8 9 allowed to slow a cumulative risk level 10 of ten to the minus four and Mr. Rao asked is that applicable then to a 11 residential cleanup and I wasn't quite 12 clear on the answer. 13

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

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
б	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 update to TACO. 2 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 followed into subpart D and is still 8 9 subject to those protections, the 10 statutory limitations that you were discussing earlier, but the way you're 11 proposing table H for PAHs, it's 12 standalone, it's not folded into 13 14 subpart D, area background. So that's our question and it sounds like, and 15 you can certainly add to your earlier 16 17 responses, but it sounds like you're also going to take a closer look and 18 get back to us at the second hearing as 19 well? Could we go off the record for 20 21 one moment? 22 (Whereupon, a discussion was had off the record.) 23 HEARING OFFICER McGILL: In 24

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
б	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	anounthing you have in mind Maulus
	everything you have in mind. You've
19	given us a couple of examples, the
20	given us a couple of examples, the
19 20 21 22	given us a couple of examples, the federal CERCLA sites and emergency
20 21	given us a couple of examples, the federal CERCLA sites and emergency response and that's helpful. If other

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.
б	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
б	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 Agency and in none of these meetings 2 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 what issues have to be addressed. Most 8 9 of the details in the agreements are 10 very technical. They go to the nature of the contaminants, the extent of the 11 12 contaminants, types of barriers, legal strategies that were used to resolve 13 14 the issues at the site. Again, it's a 15 very technical legal document, but the legalities comes from the issuance of 16 17 the state of Illinois and the acceptance by the property owner and 18 19 all of those parties have their own 20 representation on these issues. 21 HEARING OFFICER McGILL: Thank 22 you. MS. LIU: Good afternoon, 23 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
б	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 you want to add to that you can do that 2 3 in prefiled testimony or at hearing. 4 Is there anyone else who 5 wishes to testify or pose any questions today at this point? Mr. Thomas? 6 7 MR. THOMAS: I just have one follow-up question. Mr. King had made 8 9 a couple of comments that triggered these questions about the incorporation 10 by reference and other programs using 11 TACO. 12 My first question is with 13 14 regard to incorporation by references. 15 One of the ASTM methods specifically referenced in the incorporation by 16 reference section, however, SW-846 is 17 referenced as an overall incorporation, 18 that document is about this long, it's 19 a huge document. Could the methods be 20 21 specified in there instead of the 22 entire manual? There's a lot of things in there that have no applicability at 23 all to TACO. 24

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
б	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
б	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 hearing officer orders. Those on the 2 3 service list are those who wish to 4 actively participate in this proceeding 5 and receive copies not only of those orders, but also other filings such as 6 7 prefiled testimony and public comments. Prefiled testimony and 8 9 public comments may be filed on-line 10 through the clerk's office on-line. It's on the Board's web site. Again, 11 that's filling, that's not service. 12 You still have to serve those on the 13 14 service list and, please, check with 15 the Board before you do file something to make sure you have the most recent 16 version of the service list. 17 We expect copies of this 18 transcript to be in the Board's offices 19 by February 10 and we will get it 20 21 posted on our web site shortly after 22 that. 23 Are there any other matters that need to be addressed at this time? 24

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.)
19	
20	
21	
22	
23	
24	

STATE OF ILLINOIS) 1) SS. 2 3 COUNTY OF W I L L) 4 5 I, TERRY A. BUCHANAN, CSR, 6 7 do hereby state that I am a court reporter doing business in the City of Chicago, 8 9 County of Cook, and State of Illinois; that I reported by means of machine shorthand the 10 proceedings held in the foregoing cause, and 11 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 Will County, Illinois 20 21 22 SUBSCRIBED AND SWORN TO before me this ____ day of _____, A.D., 2006. 23 24 Notary Public