

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF: )  
 )  
PROPOSED AMENDMENTS TO )  
TIERED APPROACH TO CORRECTIVE )  
ACTION OBJECTIVES )  
(35 Ill. Adm. Code 742) )  
 )

R09-9  
(Rulemaking-Land)

RECEIVED  
CLERK'S OFFICE  
MAR 12 2009  
STATE OF ILLINOIS  
Pollution Control Board

**NOTICE**

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 W. Randolph, Suite 11-500  
Chicago, Illinois 60601  
**(Via Federal Express)**

Bill Richardson  
Chief Legal Counsel  
Illinois Dept. of Natural Resources  
One Natural Resources Way  
Springfield, Illinois 62702-1271  
**(Via First Class Mail)**

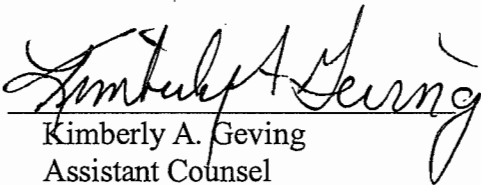
Matt Dunn  
Environmental Bureau Chief  
Office of the Attorney General  
James R. Thompson Center  
100 W. Randolph, 12<sup>th</sup> Floor  
Chicago, Illinois 60601  
**(Via First Class Mail)**

Richard McGill  
Hearing Officer  
Illinois Pollution Control Board  
James R. Thompson Center  
100 W. Randolph, Suite 11-500  
Chicago, Illinois 60601  
**(Via Federal Express)**

Participants on the Service List  
**(Via First Class Mail)**

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the Illinois Environmental Protection Agency's ("Illinois EPA") Pre-filed Responses to Pre-Filed Questions from Raymond Reott and the Illinois Environmental Regulatory Group a copy of each of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY

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

DATE: March 11, 2008

1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

(217) 782-5544

---

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF: )  
)  
PROPOSED AMENDMENTS TO TIERED )  
APPROACH TO CORRECTIVE ACTION )  
OBJECTIVES )  
(35 Ill. Adm. Code 742) )

R09-9  
(Rulemaking-Land)

RECEIVED  
CLERK'S OFFICE  
MAR 12 2009  
STATE OF ILLINOIS  
Pollution Control Board

**ILLINOIS EPA's PRE-FILED RESPONSES TO QUESTIONS SUBMITTED BY  
RAYMOND T. REOTT AND THE ILLINOIS ENVIRONMENTAL REGULATORY  
GROUP**

**QUESTIONS FROM RAYMOND REOTT**

**Question 1:** Which studies or data, if any, submitted to the Board correlate the proposed predicted indoor concentrations in the Johnson & Ettinger model to actual indoor air sampling? Of those studies, which correlate the proposed model to actual indoor sampling at sites in Illinois?

**Answer 1:** The principal document is U.S. EPA's OSWER Draft Guidance, *Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils*, published in 2002. None of the publications referenced by Illinois EPA, including U.S. EPA's Draft Guidance, are specific to actual sites in Illinois; that is not the intent of these documents.

**Question 2:** Why should depth to contamination matter for the outdoor inhalation pathway where the outdoor inhalation pathway for contamination deeper than 10 feet is excluded based upon 10 feet of any overlying clean soil, even sand, 35 Ill. Admin. Code 742 §1105(c)(3)(C)(iii), but not matter in Tier 1 for the proposed indoor inhalation pathway?

**Answer 2:** Illinois EPA used different fate and transport models to develop these two pathways. As a result of Illinois EPA's work in developing the indoor inhalation proposal, the

outdoor inhalation pathway needs to be reviewed to account for the disparity. Illinois EPA did not re-evaluate the outdoor inhalation pathway as part of this rulemaking.

**Question 3:** What are the assumptions used in the Johnson & Ettinger model?

**Answer 3:** The Johnson & Ettinger parameter values and their sources are set forth in Appendix C, Table M.

**Question 4:** Which of the assumptions in the Johnson & Ettinger model have the highest sensitivity in terms of the values proposed by the agency in its Tier 1 Table G?

**Answer 4:** The most sensitive parameters are water-filled soil porosity and fraction organic carbon content.

**Question 5:** What is the basis for believing that the chosen assumptions reflect representative Illinois conditions for the various parameters?

**Answer 5:** Illinois EPA used numbers in the existing TACO rule as default parameters.

**Question 6:** Is the default porosity value chosen for the model for Tier 1 representative of typical Illinois soil conditions? Is the FOC value selected as a default condition in the proposed model for Tier 1 representative of typical Illinois soil conditions? (Illinois EPA's Proposed Amendments, 35 Ill. Admin. Code §742, Appendix C, Table M)

**Answer 6:** If "typical" means average, then the answer to both questions is no. Using an average concept for these parameters would not be consistent with TACO. Illinois EPA chose Tier 1 default parameter values that are protective when applied statewide.

---

**Question 7:** Did the agency review any of the articles critical of the cumulative conservative assumptions of the Johnson & Ettinger model such as those published by USEPA? (See USEPA, Sept. 2005, J. Weaver and F. Tillman, Uncertainty and the Johnson-Ettinger Model for Vapor Intrusion Calculations; USEPA, Sept. 2005, F. Tillman and J. Weaver, Review of

Recent Research on Vapor Intrusion ). If so, why are those criticisms not appropriate to consider as the Board evaluates whether to adopt regulatory standards based on the Johnson & Ettinger model?

**Answer 7:** Yes, Illinois EPA did review those articles. It is appropriate for the Board to consider any relevant information.

**Question 8:** Why is Illinois EPA proposing to apply the Johnson & Ettinger model to Illinois LUST sites when USEPA recommends against its use for LUST sites?

**Answer 8:** Key contaminants addressed in the LUST program – BTEX, MTBE, and naphthalene – are volatile chemicals. The program exclusion suggested here would not be consistent with TACO because TACO is a cross-program methodology that does not care whether the environmental release comes from a tank or a drum or a spill.

**Question 9:** Why is Illinois proposing to use the Johnson & Ettinger model in other contexts where USEPA does not recommend its use such as sites with buried pipelines where significant lateral flow of vapors occurs and sites with very shallow groundwater where the groundwater wets the building foundation? (USEPA's User Guide for Evaluating Subsurface Vapor Intrusion into Buildings, Feb. 22, 2004, p. 69-70).

**Answer 9:** Illinois EPA is not recommending the use of this model where the underlying assumptions of the model are violated. At sites where there are known preferential pathways, as mentioned in the above question, the I&E model will not be used and the specific evaluation must take into account the site specific conditions, i.e. the nature and extent of the preferential pathways. This also applies to situations where the groundwater level is very shallow.

**Question 10:** What is the effect on the Tier 1 values in Table G of assuming that the default building has a basement rather than slab on grade construction?

**Answer 10:** It raises the Tier 1 values.

**Question 11:** Did Illinois EPA review any studies of typical building size in Illinois before choosing the assumed dimensions in the proposed rule?

**Answer 11:** Illinois EPA did not use a typical building size because that would be an average and not sufficiently protective. Using an average approach would have required conditioning of every No Further Remediation letter based on building size. Illinois EPA based its default dimensions on older, smaller homes and small retail sites.

### **QUESTIONS FROM THE ILLINOIS ENVIRONMENTAL REGULATORY GROUP**

**Question 1:** What actions will the Agency take if an indoor inhalation issue is discovered at a leaking underground storage tank (“LUST”) site where the owner or operator has already been issued a No Further Remediation (“NFR”) letter for a prior release?

- a. What actions will the Agency take if the indoor inhalation issue is related to the prior release?
- b. Can the prior LUST incident be re-opened?
- c. Would the owner or operator report the indoor inhalation issue as a new release?

---

**Answer 1:** The Agency’s intent is not to reopen LUST site, due to an indoor inhalation issue, for which an NFR Letter has been issued. If the tank owner or operator wishes to address an indoor inhalation issue at a LUST site and to obtain a new NFR Letter, the owner or operator would need to enroll the site in the Agency’s Site Remediation Program (or Voluntary Cleanup Program).

- a. The owner or operator would be referred to the Site Remediation Program.
- b. No. The LUST incident will not be reopened.
- c. No. The indoor inhalation issue should not be reported as a new release.

**Question 2:** Will corrective action to address the indoor inhalation pathway be eligible for reimbursement from the LUST Fund for releases where an NFR letter has already been issued?

**Answer 2:** No. If the owner or operator of a LUST site enrolls the site in the Site Remediation Program, the owner or operator would be responsible for paying corrective action costs at the site.

**Question 3:** Will the Illinois Pollution Control Board's LUST regulations need to be amended to address issues related to reimbursement from the LUST Fund for indoor inhalation activities?

**Answer 3:** Yes. The LUST Program regulations will need to be amended to address issues related to reimbursement for the sites that have not received an NFR Letter.

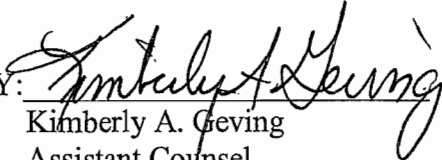
**Question 4:** In the past, the Agency has indicated that it will void NFR letters at sites where an indoor inhalation issue is discovered. Is there an alternative process by which the indoor inhalation issue can be addressed at the site without voiding the NFR letter?

**Answer 4:** The owner or operator should enroll the site in the Site Remediation Program for an NFR Letter addressing the indoor inhalation exposure route.

---

Respectfully submitted,

ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY

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

Date: March 11, 2009

1021 North Grand Ave. East  
PO Box 19276  
Springfield, Illinois 62794-9276

(217) 782-5544



STATE OF ILLINOIS            )  
  )  
COUNTY OF SANGAMON        )

**PROOF OF SERVICE**

I, the undersigned, on oath state that I have served the attached Pre-filed Responses to Pre-Filed Questions of Raymond Reott and the Illinois Environmental Regulatory Group upon the persons to whom they are directed, by placing a copy of each in an envelope addressed to:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 W. Randolph, Suite 11-500  
Chicago, Illinois 60601

Bill Richardson  
Chief Legal Counsel  
Illinois Dept. of Natural Resources  
One Natural Resources Way  
Springfield, Illinois 62702-1271


Matt Dunn  
Environmental Bureau Chief  
Office of the Attorney General  
James R. Thompson Center  
100 W. Randolph, 12<sup>th</sup> Floor  
Chicago, Illinois 60601

Richard McGill  
Hearing Officer  
Illinois Pollution Control Board  
James R. Thompson Center  
100 W. Randolph, Suite 11-500  
Chicago, Illinois 60601

Participants on the Service List

and mailing them (Federal Express to the Clerk and Hearing Officer)(First Class Mail to everyone else) from Springfield, Illinois on March 11, 2009, with sufficient postage affixed as indicated above.

---



SUBSCRIBED AND SWORN TO BEFORE ME

This 11<sup>th</sup> day of March, 2009.

Brenda Boehner

Notary Public



BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF: )  
 )  
PROPOSED AMENDMENTS TO )  
TIERED APPROACH TO CORRECTIVE )  
ACTION OBJECTIVES )  
(35 Ill. Adm. Code 742) )  
 )

R09-9  
(Rulemaking-Land)

RECEIVED  
CLERK'S OFFICE

MAR 12 2009

STATE OF ILLINOIS  
Pollution Control Board

NOTICE

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 W. Randolph, Suite 11-500  
Chicago, Illinois 60601  
**(Via Federal Express)**

Bill Richardson  
Chief Legal Counsel  
Illinois Dept. of Natural Resources  
One Natural Resources Way  
Springfield, Illinois 62702-1271  
**(Via First Class Mail)**

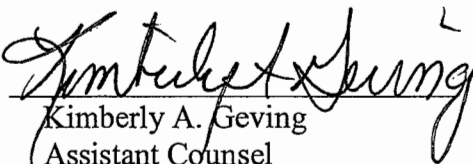
Matt Dunn  
Environmental Bureau Chief  
Office of the Attorney General  
James R. Thompson Center  
100 W. Randolph, 12<sup>th</sup> Floor  
Chicago, Illinois 60601  
**(Via First Class Mail)**

Richard McGill  
Hearing Officer  
Illinois Pollution Control Board  
James R. Thompson Center  
100 W. Randolph, Suite 11-500  
Chicago, Illinois 60601  
**(Via Federal Express)**

Participants on the Service List  
**(Via First Class Mail)**

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the Illinois Environmental Protection Agency's ("Illinois EPA") Errata Sheet Number 4 and Supplemental Testimony of Tracey Hurley a copy of each of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY

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

DATE: March 11, 2009

1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

(217) 782-5544

---

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

RECEIVED  
CLERK'S OFFICE

MAR 12 2009

STATE OF ILLINOIS  
Pollution Control Board

IN THE MATTER OF: )  
)  
PROPOSED AMENDMENTS TO )  
TIERED APPROACH TO CORRECTIVE )  
ACTION OBJECTIVES )  
(35 Ill. Adm. Code 742) )

R09-9

(Rulemaking-Environ)

**ERRATA SHEET NUMBER 4**

NOW COMES the Illinois Environmental Protection Agency ("Illinois EPA") through one of its attorneys, Kimberly Geving, and submits this ERRATA SHEET NUMBER 4 to the Illinois Pollution Control Board ("Board") and the participants on the Service List. Tracey Hurley will provide oral testimony in support of these changes at the March 17, 2009 hearing.

Section

Appendix B, Table A

For the chemical Alachlor in the Ingestion column make the following change: 8.0° 8°.

For the chemical Aldrin in the Outdoor Inhalation column make the following change: 0.90° 0.9°.

For the chemical Benzene in the Outdoor Inhalation column make the following change: 0.80° 0.8°.

For the chemical Bis(2-chloroethyl)ether in the Outdoor Inhalation column make the following change: 0.30° 0.3°.

For the chemical 1,2-Dibromo-3-chloropropane in the Ingestion column make the following change: 0.80° 0.8°.

For the chemical 1,1-Dichloroethane in the Class I column make the following change: 8.0° 8°.

For the chemical 1,2-Dichloroethylene in the Ingestion column make the following change: 7.0° 7°.

For the chemical Dieldrin in the Outdoor Inhalation column make the following change: 1.0<sup>e</sup> 1<sup>e</sup>.

For the chemical Endothall in both the Class I and Class II columns make the following change: 0.70<sup>f</sup> 0.7<sup>f</sup>.

For the chemical Heptachlor epoxide in the Class II column make the following change: 8.0<sup>f</sup> 8<sup>f</sup>.

For the chemical Hexachlorobenzene in the Ingestion column make the following change: 0.40<sup>e</sup> 0.4<sup>e</sup>. In the Class I column make the following change: 0.80<sup>z</sup> 0.8<sup>z</sup>. In the Class II column make the following change: 4.0 4.

For the chemical Alpha-HCH in the Ingestion column make the following change: 0.10<sup>e</sup> 0.1<sup>e</sup>.

For the chemical Isophorone in the Class I column make the following change: 7.0<sup>b</sup> 7<sup>b</sup>. In the Class II column make the following change: 7.0 7.

For the chemical 2-Methylphenol in both the Class I and Class II columns make the following change: 2.0<sup>f</sup> 2<sup>f</sup>.

For the chemical Picloram in the Class I column make the following change: 2.0<sup>f</sup> 2<sup>f</sup>.

For the chemical Tetrachloroethylene in the Outdoor Inhalation column make the following change: 2.0<sup>e</sup> 2<sup>e</sup>.

For the chemical Toxaphene in the Class I column make the following change: 6.0<sup>f</sup> 6<sup>f</sup>.

---

For the chemical 1,1,1-Trichloroethane in the Class I column make the following change: 2.0<sup>f</sup> 2<sup>f</sup>.

For the chemical 1,1,2-Trichloroethane in the Class II column make the following change: 0.30<sup>f</sup> 0.3<sup>f</sup>.

For the chemical Endothall in both the Class I and Class II columns make the following change: 0.70<sup>f</sup> 0.7<sup>f</sup>.

For the chemical Heptachlor epoxide in the Class II column make the following change: 8.0<sup>r</sup> 8<sup>f</sup>.

For the chemical Hexachlorobenzene in the Class I column make the following change: 0.80<sup>z</sup> 0.8<sup>z</sup>. For the Class II column make the following change: 4.0 4.

For the chemical Isophorone in the Class I column make the following change: 7.0<sup>b</sup> 7<sup>b</sup>. In the Class II column make the following change: 7.0 7.

For the chemical 2-Methylphenol in both the Class I and Class II columns make the following change: 2.0<sup>r</sup> 2<sup>f</sup>.

For the chemical Methyl bromide in the Construction Worker Outdoor Inhalation column make the following change: 2.0<sup>b</sup> 2<sup>b</sup>.

For the chemical Picloram in the Class I column make the following change: 2.0<sup>r</sup> 2<sup>f</sup>.

For the chemical Toxaphene in the Class I column make the following change: 6.0<sup>r</sup> 6<sup>f</sup>.

For the chemical 1,1,1-Trichloroethane in the Class I column make the following change: 2.0<sup>r</sup> 2<sup>f</sup>.

For the chemical Vinyl chloride in the Industrial/Commercial Ingestion column make the following change: 8.0<sup>c</sup> 8<sup>e</sup>.

Appendix B, Table C

For the chemical Antimony change the values for all of the pH ranges as follows: 5.0 5.

---

For the chemical Arsenic delete all the proposed changes, leave the strikeouts for each existing value and add a new ---<sup>b</sup> across the entire row. Additionally, delete the proposed footnote b and replace it with a new footnote <sup>b</sup>For Arsenic, see 742. Appendix A, Table G.

For the chemical 2,4,6-Trichlorophenol in the column 5.25 to 5.74 make the following change: delete the underscored 1 and replace it with 1.0.

Appendix B, Table D

For the chemical 2,4-Dichlorophenol in the pH 7.75 to 8.24 column make the following change: delete the underscored 9 and replace it with 9.0.

For the chemical Pentachlorophenol in the pH 4.75 to 5.24 column make the following change: delete the underscored 7 and replace it with 7.0.

For the chemical 2,4,6-Trichlorophenol in the pH 8.75 to 9.0 column make the following change: delete the underscored 0.8 and replace it with 0.80.

Appendix B, Table G

For the chemical Bis(2-chloroethyl)ether in the Soil Residential column make the following change: delete the underscored 0.5<sup>d</sup> and replace it with 0.50<sup>d</sup>.

For the chemical Chloroform in the Soil Industrial/Commercial column make the following change: 0.20<sup>d</sup> ~~0.2<sup>d</sup>~~. In the Groundwater Industrial/Commercial column make the following change: 1.0<sup>d</sup> ~~1<sup>d</sup>~~.

For the chemical Hexachlorocyclopentadiene in the Soil Residential column make the following change: 5.0<sup>b</sup> ~~5<sup>b</sup>~~.

For the chemical Polychlorinated biphenyls in the Soil Gas Industrial/Commercial column make the following change: 9.0<sup>e</sup> ~~9<sup>e</sup>~~.

For the chemical Trichloroethylene in the Groundwater Industrial/Commercial column make the following change: 6.0<sup>d</sup> ~~6<sup>d</sup>~~.

Appendix C, Table E

For the chemical Methyl tertiary-butyl ether in the First Order Degradation Constant column make the following change: delete 1.93E-03 and replace with No Data.

---

Appendix C, Table L

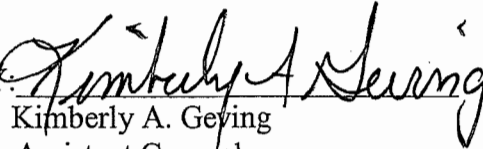
For equation J&E1 replace the existing equation with this one:

$$RO_{\text{indoor-air}} = \frac{TR \times AT_c \times 365 \frac{\text{days}}{\text{yr}}}{ED \times EF \times URF \times 1000 \frac{\mu\text{g}}{\text{mg}}}$$



Respectfully submitted,

ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY

BY:   
Kimberly A. Geying  
Assistant Counsel  
Division of Legal Counsel

DATE: March 11, 2009

1021 North Grand Ave. East  
PO Box 19276  
Springfield, Illinois 62794-9276

(217) 782-5544

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF: )  
)  
PROPOSED AMENDMENTS TO: )  
TIERED APPROACH TO CORRECTIVE )  
ACTION OBJECTIVES )  
(35 Ill. Adm. Code 742) )

R09-9  
(Rulemaking-Land)

RECEIVED  
CLERK'S OFFICE  
MAR 12 2009  
STATE OF ILLINOIS  
Pollution Control Board

**SUPPLEMENTAL TESTIMONY OF TRACEY HURLEY**

This testimony is in support of changes contained in Errata Sheet Number 4. The remediation objectives listed in Appendix B, Tables A, B, C, D, and G should be rounded to two significant figures. This has been our practice since the original TACO. During our review of comments and other Errata, we noticed that some of the remediation objectives have not been rounded correctly. We are not changing the soil remediation objectives for PCBs, the groundwater remediation objectives based on MCLs, or the values for the soil component of the groundwater ingestion exposure route for the inorganics based on MCLs because these values are from USEPA. There are no changes to Appendix B, Tables E or F. We are changing the values listed for arsenic in Appendix B, Table C which are now lower than the soil background values. We also have become aware of additional corrections that are necessary, for the First Order Degradation Constant for Methyl tertiary-butyl ether in Appendix C, Table E and to equation J&E1 in Appendix C, Table L.

Appendix B, Table A

For Alachlor change the Ingestion value from 8<sup>e</sup> to 8.0<sup>e</sup>.

For Aldrin change Outdoor Inhalation value from 0.9<sup>e</sup> to 0.90<sup>e</sup>.

For Benzene change the Outdoor Inhalation value from 0.8<sup>e</sup> to 0.80<sup>e</sup>.

For Bis (2-chloroethyl)ether change the Outdoor Inhalation value from 0.3<sup>e</sup> to 0.30<sup>e</sup>.

For 1,2-Dibromo-3-chloropropane change the ingestion value from 0.8<sup>e</sup> to 0.80<sup>e</sup>.

For 1,1-Dichloroethane change the Class I value from 8<sup>e</sup> to 8.0<sup>e</sup>.

For 1,2-Dichloroethylene change the Ingestion value from 7<sup>e</sup> to 7.0<sup>e</sup>.

For Dieldrin change the Outdoor Inhalation value from 1<sup>e</sup> to 1.0<sup>e</sup>.

For Endothall change both the Class I and Class II values from 0.7<sup>r</sup> to 0.70<sup>r</sup>.

For Heptachlor epoxide change the Class II value from 8<sup>r</sup> to 8.0<sup>r</sup>.

For Hexachlorobenzene change the Ingestion value from 0.4<sup>e</sup> to 0.40<sup>e</sup>, change the Class I value from 0.8<sup>z</sup> to 0.80<sup>z</sup>, and change the Class II value from 4 to 4.0.

For Alpha-HCH change the Ingestion value from 0.1<sup>e</sup> to 0.10<sup>e</sup>.

For Isophorone change the Class I value from 7<sup>b</sup> to 7.0<sup>b</sup> and change the Class II value from 7 to 7.0.

For 2-Methylphenol change both the Class I and Class II values from 2<sup>r</sup> to 2.0<sup>r</sup>.

For Picloram change the Class I value from 2<sup>r</sup> to 2.0<sup>r</sup>.

For Tetrachloroethylene change the Outdoor Inhalation value from 2<sup>e</sup> to 2.0<sup>e</sup>.

For Toxaphene change the Class I value from 6<sup>r</sup> to 6.0<sup>r</sup>.

For 1,1,1-Trichloroethane change the Class I value from 2<sup>r</sup> to 2.0<sup>r</sup>.

For 1,1,2-Trichloroethane change the Class II value from 0.3<sup>r</sup> to 0.30<sup>r</sup>.

---

#### Appendix B, Table B

For Endothall change both the Class I and Class II values from 0.7<sup>r</sup> to 0.70<sup>r</sup>.

For Heptachlor epoxide change the Class II value from 8<sup>r</sup> to 8.0<sup>r</sup>.

For Hexachlorobenzene change the Class I value from 0.8<sup>z</sup> to 0.80<sup>z</sup>, and change

the Class II value from 4 to 4.0.

For Isophorone change the Class I value from 7<sup>b</sup> to 7.0<sup>b</sup> and change the Class II value from 7 to 7.0.

For 2-Methylphenol change both the Class I and Class II values from 2<sup>f</sup> to 2.0<sup>f</sup>.

For Methyl bromide change the Construction Worker Outdoor Inhalation value from 2<sup>b</sup> to 2.0<sup>b</sup>.

For Picloram change the Class I value from 2<sup>r</sup> to 2.0<sup>r</sup>.

For Toxaphene change the Class I value from 6<sup>r</sup> to 6.0<sup>r</sup>.

For 1,1,1-Trichloroethane change the Class I value from 2<sup>r</sup> to 2.0<sup>r</sup>.

For Vinyl chloride change the Industrial/Commercial Ingestion value from 8<sup>e</sup> to 8.0<sup>e</sup>.

#### Appendix B, Table C

For Antimony change the values for all of the pH ranges from 5 to 5.0.

For Arsenic the Class I Groundwater Remediation Objective listed in Appendix B, Table E has been lowered to reflect the change in the proposed Groundwater Quality Standards (35 Ill. Adm. Code 620, R-08-18) for Class I groundwater. The pH Specific Soil Remediation Objectives for the Soil Component of the Groundwater Ingestion Route (Class I Groundwater) listed in Appendix B, Table C are based on the Class I groundwater remediation objective. The values for arsenic in Appendix B, Table C are

---

now less than the soil background values listed in Appendix A, Table G. It was not our intent to have a soil remediation objective less than the soil background value. Therefore, we are deleting the numerical values for arsenic for all of the pH ranges and replacing them with “---<sup>b</sup>”. We are adding a corresponding footnote b which states “For arsenic,

see 742.Appendix A, Table G.” This is similar to the way we have treated arsenic for the ingestion route of exposure in Appendix B, Tables A and B. There is no change to the arsenic values listed in Appendix B, Table D for Class II groundwater because the Class II groundwater objectives have not changed.

For 2,4,6-Trichlorophenol change the value for pH 5.25 to 5.74 from 1 to 1.0.

Appendix B, Table D

For 2,4-Dichlorophenol change the value for pH 7.75 to 8.24 from 9 to 9.0.

For Pentachlorophenol change the value for pH 4.75 to 5.24 from 7 to 7.0.

For 2,4,6-Trichlorophenol change the value for pH 8.75 to 9.0 from 0.8 to 0.80.

Appendix B, Table G

For Bis(2-chloroethyl)ether change the Soil Residential value from 0.5<sup>d</sup> to 0.50<sup>d</sup>.

For Chloroform change the Soil Industrial/Commercial value from 0.2<sup>d</sup> to 0.20<sup>d</sup> and change the Groundwater Industrial/Commercial value from 1<sup>d</sup> to 1.0<sup>d</sup>.

For Hexachlorocyclopentadiene change the Soil Residential value from 5<sup>b</sup> to 5.0<sup>b</sup>.

For Polychlorinated biphenyls change the Soil Gas Industrial/Commercial value from 9<sup>g</sup> to 9.0<sup>g</sup>.

For Trichloroethylene change the Groundwater Industrial/Commercial value from 6<sup>d</sup> to 6.0<sup>d</sup>.

Appendix C, Table E

---

For Methyl tertiary-butyl ether the value for First Order Degradation Constant should be changed from 1.93E-03 to No Data. Recall that during the hearings for the TACO R00-19 amendments, the Illinois EPA presented evidence that Methyl tertiary-butyl ether does not degrade under some circumstances and therefore recommended that

the value for this parameter should be zero (page 3 of Dr. Hornshaw's testimony). The Board agreed as stated in its First Notice Opinion and Order for the R00-19(C) docket at pages 5 and 6. During our updating of the physical/chemical constants used in TACO equations, we mistakenly replaced the No Data entry with the value of 1.9E-03 available from the literature source. As discussed above, this value should not be used and the original No Data entry should be re-listed.

Appendix C, Table L

For equation J&E1 we are correcting the units to  $\mu\text{g}/\text{mg}$  after the 1000 conversion factor in the denominator. This is a correction to a change made in Errata Sheet 3. The units were correctly listed in my pre-filed testimony of February 20, 2009 (pages 2-3) but were incorrectly listed in Errata Sheet 3 as  $\mu\text{g}/\text{g}$ .

This concludes my testimony.

STATE OF ILLINOIS )  
 )  
COUNTY OF SANGAMON )

**PROOF OF SERVICE**

I, the undersigned, on oath state that I have served the attached Errata Sheet  
Number 4 and Supplemental Testimony of Tracey Hurley upon the persons to whom they  
are directed, by placing a copy of each in an envelope addressed to:

Dorothy Gunn, Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 W. Randolph, Suite 11-500  
Chicago, Illinois 60601

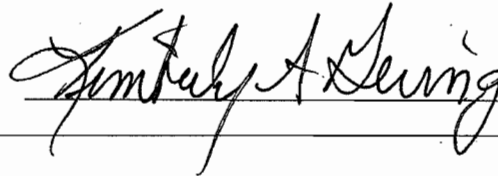
Bill Richardson  
Chief Legal Counsel  
Illinois Dept. of Natural Resources  
One Natural Resources Way  
Springfield, Illinois 62702-1271

Matt Dunn  
Environmental Bureau Chief  
Office of the Attorney General  
James R. Thompson Center  
100 W. Randolph, 12<sup>th</sup> Floor  
Chicago, Illinois 60601

Richard McGill  
Hearing Officer  
Illinois Pollution Control Board  
James R. Thompson Center  
100 W. Randolph, Suite 11-500  
Chicago, Illinois 60601

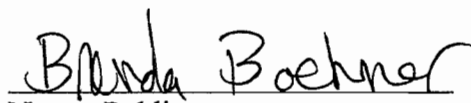
Participants on the Service List

and mailing them (Federal Express to the Clerk and Hearing Officer) (First Class Mail to  
everyone else) from Springfield, Illinois on March 11, 2009, with sufficient postage  
affixed as indicated above.



SUBSCRIBED AND SWORN TO BEFORE ME

This 11<sup>th</sup> day of March, 2009.

  
Notary Public



Party Name	Role	City & State	Phone/Fax
<u>Illinois Environmental Protection Agency</u> Interested Party	1021 North Grand Avenue East P.O. Box 19276	Springfield IL 62794- 9276	217/782- 5544 217/782- 9807
Kimberly A. Geving, Assistant Counsel Annet Godiksen, Legal Counsel			
<u>IEPA</u> Petitioner	1021 North Grand Avenue East P.O. Box 19276	Springfield IL 62794- 9276	217/782- 5544 217/782- 9807
Kimberly A. Geving, Assistant Counsel			
<u>Hodge Dwyer Zeman</u> Complainant	3150 Roland Avenue Post Office Box 5776	Springfield IL 62705- 5776	217/523- 4900 217/523- 4948
Katherine D. Hodge Monica T. Rios			
<u>EPI</u> Interested Party	16650 South Canal	South Holland IL 60473	
Bob Mankowski			
<u>Chemical Industry Council of Illinois</u> Interested Party	1400 East Touhy Avenue Suite 100	DesPlaines IL 60019- 3338	
Lisa Frede			
<u>Bellande &amp; Sargis Law Group, LLP</u> Interested Party	19 South LaSalle Street Suite 1203	Chicago IL 60603	312/853- 8701 312/853- 8702
Mark Robert Sargis			
<u>Hanson Engineers, Inc.</u> Interested Party	1525 South Sixth Street	Springfield IL 62703- 2886	217/788- 2450 217/788- 2503
Tracy Lundein			
<u>Conestoga-Rovers &amp; Associates</u> Interested Party	8615 West Bryn Mawr Avenue	Chicago IL 60631	773/380- 9933 773/380- 6421
Douglas G. Soutter			
<u>Office of the Attorney General</u> Interested Party	Environmental Bureau 69 W. Washington, 18th Floor	Chicago IL 60602	312/814- 0660 312/814- 2347
Matthew J. Dunn, Division Chief			
<u>Navy Facilities and Engineering Command</u> Interested Party	201 Decatur Avenue Building 1A	Great Lakes IL 60088- 2801	847/688- 2600 847/688- 2319
Mark Schultz, Regional Environmental Coordinator			
<u>Illinois Pollution Control Board</u> Interested Party	100 W. Randolph St. Suite 11-500	Chicago IL 60601	312/814- 3620 312/814-



3669

Dorothy M. Gunn, Clerk of the Board  
Richard McGill, Hearing Officer

Commonwealth Edison 10 South Dearborn Street Chicago  
Interested Party 35FNW IL 60603

Diane H. Richardson

Clayton Group Services 3140 Finley Road Downers  
Interested Party Grove  
IL 60515

Monte Nienkerk

Weaver Boos & Gordon 2021 Timberbrook Lane Springfield  
Interested Party IL 62702

Elizabeth Steinhour

Andrews Environmental Engineering 3300 Ginger Creek Drive Springfield  
Interested Party IL 62711

Kenneth W. Liss

Graef Anhalt Schloemer & Associates, Inc. 8501 West Higgins Road Chicago  
Interested Party Suite 280 IL 60631-2801

Dr. Douglas C. Hambley, P.E., P.G.

Missman Stanley & Associates 333 East State Street Rockford  
Interested Party IL 61110-0827

John W. Hochwarter

Jeffrey Larson

Trivedi Associates, Inc. 2055 Steeplebrook Court Naperville  
Interested Party IL 60565

Chetan Trivedi

Illinois Department of Natural Resources One Natural Resources Way Springfield 217/782-  
Interested Party IL 62702-1809  
1271 217/524-9640

Stan Yonkauski

William Richardson, Chief Legal Counsel

Suburban Laboratories, Inc. 4140 Litt Drive Hillside 708-544-  
Interested Party IL 60162 3260

Jarrett Thomas, V.P.

Illinois Department of Transportation 2300 S. Dirksen Parkway Springfield  
Interested Party Room 302 IL 62764

Steven Gobelman

McGuire Woods LLP 77 W. Wacker Chicago 312/849-  
Interested Party Suite 4100 IL 60601 8100

David Rieser

Reott Law Offices, LLC 35 East Wacker Drive Chicago 312/332-  
Interested Party Suite 650 IL 60601 7544

Raymond T. Reott

Jorge T. Mihalopoulos

Environmental Management & Technologies, Inc. 3010 Gill Street Bloomington 309/661-  
Interested Party IL 61704 2300  
309661-2306

Craig Gocker, President

<u>IL Environmental Regulatory Group</u> Interested Party	215 East Adams Street	Springfield IL 62701	217/522- 5512 217/522- 5518
Alec M. Davis			
<u>Chicago Department of Law</u> Interested Party	30 N. LaSalle Street Suite 900	Chicago IL 60602	312/742- 3990 312/744- 6798
Charles A. King, Assistant Corporation Counsel			
<u>SRAC</u> Interested Party	2510 Brooks Drive	Decatur IL 62521	
Harry Walton			
<u>Burns &amp; McDonnell Engineering Company, Inc.</u> Interested Party	210 South Clark Street, Suite 2235 The Clark Adams Building	Chicago IL 60603	6306751625
Lawrence L. Fieber, Principal			

Total number of participants: 34