PUBLIC ACCESS MATERIALS

COMMITTEE TO ASSESS THE HEALTH IMPLICATIONS OF PERCHLORATE INGESTION


9. One-pager on FDA activities related to Perchlorate in Food.


12. Strawson, J., Q. Zhao, and M. Dourson. Reference dose for perchlorate based on thyroid hormone change in pregnant women as the critical effect. (available at www.tera.org/perchlorate/welcome.htm)


27. Transcript of the First Meeting of the NAS Committee to Assess the Health Implications of Perchlorate Ingestion. NOTE: This is an unedited verbatim transcript of the first meeting of the Committee to Assess the Health Implications of Perchlorate Ingestion and is not an official report of National Academy of Sciences, National Academy of Engineering, Institute of Medicine, or National Research Council (collectively “National Academies”). Opinions and statements included in the transcript are solely those of the individual persons or participants at the meeting, and are not necessarily adopted or endorsed or verified as accurate by the National Academies.


31. Dourson, M. and C. Bittner. 2003. Includes (a) comments by Christopher Bittner, Utah Department of Quality, on the October 2003 Draft of the Reference Dose for Perchlorate Based on Thyroid Hormone Change in Pregnant Women as the Critical Effect and (b) e-mail exchange (questions and responses) between Michael Dourson, an author on the draft report, and Christopher Bittner.


35. Slides of rat thyroid illustrating ammonium perchlorate induced hypertrophy, hyperplasia, and adenoma. Slides received from Douglas Wolf on November 24, 2003.


47. Correction to Greer et al. (2002) published in Environmental Health Perspectives 110(10): A564.


49. Wickman, R. E-mail received from Richard Wickman (NASA) on November 24, 2003, providing correction to the transcript of public session for the Committee to Assess the Health Implications of Perchlorate Ingestion held October 27, 2003.

50. Pearce, E. E-mail received from Elizabeth Pearce on December 5, 2003, providing unpublished data from iodine studies in healthy women and in pregnant women from the Boston Medical Center Obstetric Clinic.

51. Pearce, E. E-mail received from Elizabeth Pearce on December 10, 2003, providing additional information on the iodine levels in pregnant women from the Boston Medical Center Obstetric Clinic.

53. Dourson, M. E-mail received from Michael Dourson (TERA) on December 12, 2003, providing a slide of poster presented at the Society for Risk Analysis showing that a PBPK model can be developed for different life stages in humans and can be used to predict doses for inhibition of iodine uptake in the fetus.


64. Hagemann, M. 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Slides of presentation made to committee on December 13, 2003, in Irvine, CA.


68. Pleus, R. 2003. The Dose Response for Perchlorate Inhibition of Thyroidal Radiiodine Uptake in Human Volunteers. Slides of presentation made to committee on December 13, 2003, in Irvine, CA.

69. Crump, K. 2003. Comments to NRC Committee to Assess the Health Implications of Perchlorate Ingestion. Slides of presentation made to committee on December 13, 2003, in Irvine, CA.


74. 2003 Water Quality Report (with data from calendar year 2002). Irvine Ranch Water District. PWS ID#: CA3010092.
75. Perchlorate Study Group. Comments to the Committee to Assess the Health Implications of Perchlorate Ingestion [BEST-K-03-05-A]. Regarding EPA’s analysis and disposition of the human studies and public comments made to EPA regarding the human studies. On behalf of the Perchlorate Study Group, December 11, 2003, Irvine, CA.

76. Torres, R. Letter received from Raymond Torres, Tribal Chairman, The Torres Martinez Desert Cahuilla Indians dated December 5, 2003. Regarding perchlorate contamination in drinking water wells on the Torres Martinez Indian Reservation.

77. Croft, T. 2003. Overview of Las Vegas Valley Perchlorate Remedial Efforts. Information provided by Todd Croft (Nevada Division of Environmental Protection) to committee on December 13, 2003, in Irvine, CA.


79. Wolf, D. 2003. E-mail received from Doug Wolf (EPA) on December 15, 2003, in response to questions raised at the public meeting of the Committee to Assess the Health Implications of Perchlorate on December 12, 2003, in Irvine, CA.


84. Koller, L. 2003. E-mail received from Loren Koller on December 18, 2003, that provides responses to EPA’s comments for rejecting the recommendations of the 2002 Peer Review Study Panel on the immunotoxicology of perchlorate.

85. (a) Transcript of the Second Meeting of the NAS Committee to Assess the Health Implications of Perchlorate Ingestion (December 12, 2003). NOTE: This is an
unedited verbatim transcript of the second meeting of the Committee to Assess the Health Implications of Perchlorate Ingestion and is not an official report of National Academy of Sciences, National Academy of Engineering, Institute of Medicine, or National Research Council (collectively “National Academies”). Opinions and statements included in the transcript are solely those of the individual persons or participants at the meeting, and are not necessarily adopted or endorsed or verified as accurate by the National Academies.

(b) Transcript of the Second Meeting of the NAS Committee to Assess the Health Implications of Perchlorate Ingestion. (December 13, 2003). NOTE: This is an unedited verbatim transcript of the second meeting of the Committee to Assess the Health Implications of Perchlorate Ingestion and is not an official report of National Academy of Sciences, National Academy of Engineering, Institute of Medicine, or National Research Council (collectively “National Academies”). Opinions and statements included in the transcript are solely those of the individual persons or participants at the meeting, and are not necessarily adopted or endorsed or verified as accurate by the National Academies.

86. Dourson, M. 2004. E-mail received from Michael Dourson on January 2, 2004 regarding information discussed at the Perchlorate State of the Science Meeting.

87. EPA. 2004. Information received from EPA on programs, model specifications, and data for the Bayesian analysis of the motor activity data – (a) WinBugs (Bayesian software) program, (b) output from the Bayesian software, (c) model parameters or specifications, (d) S-Plus software program for reading data into the Bayesian program, and (e) motor activity data.


94. Dourson, M. E-mail received from Michael Dourson, TERA, on February 6, 2004. Attachment -- Reference Dose for Perchlorate Based on Thyroid Hormone Change in Pregnant Women as the Critical Effect. Available at http://www.tera.org/perchlorate/welcome.htm.

95. Wolf, D. E-mail received from Douglas Wolf, EPA, on February 19, 2004, regarding thyroid tumors in animals. Attachment – Slides of thyroid adenoma from Argus multi-generational study.

96. Jarabek, A. E-mail received from Annie Jarabek, EPA, on February 20, 2004, regarding thyroid tumors in animals.

97. Ladd, L. Numerous e-mails received from Larry Ladd, perchlorate awareness activist. (a) E-mail received on February 6, 2004, (b) E-mail received on February 6, 2004, (c) E-mail received on February 22, 2004, (d) E-mail received on February 23, 2004, (e) E-mail received on February 24, 2004.

98. Lamm, S. E-mail received from Steven Lamm, Consultants in Epidemiology and Occupational Health, on February 18, 2004, regarding EPA interpretation of Lawrence et al. data.

99. Dourson, M. E-mail received from Michael Dourson, TERA, on March 17, 2004. Attachment -- Update of Study of Pregnant Women in Three Cities in Northern Chile with Varying Levels of Environmental Perchlorate Exposure.

100. Dourson, M. E-mail received from Michael Dourson, TERA, on March 18, 2004. Attachment -- SOT poster presentation of the use of human and animal PBPK models in risk assessment for perchlorate.

101. Pearce, E. E-mail received from Elizabeth Pearce, on March 19, 2004, regarding unpublished data on urine and breast milk iodine levels in a small sample of Boston-area lactating women.

102. Jennings, A. Materials submitted by Allen Jennings, USDA. (a) Survey of lettuce for potential perchlorate accumulation. (b) Lettuce results from Dr. Sanchez. (c) Perchlorate Residues on Agricultural Produce Irrigated by Water from the Colorado River.

103. Perchlorate Study Group. March 17, 2004. Comments to the Committee to
Assess the Health Implications of Perchlorate Ingestion, regarding status of new research projects.


107. Schwartz, J. E-mail received from Jackie Schwartz on April 9, 2004, regarding the exposure assessment used in her master’s thesis.

108. West, C. R. May 19, 2004. Letter regarding Massachusetts Department of Environmental Protection’s draft, Perchlorate, Toxicological Profile and Health Assessment (May 2004). Attachment -- Massachusetts Department of Environmental Protection’s draft, Perchlorate, Toxicological Profile and Health Assessment (May 2004).


110. Lamm, S. Materials submitted by Steve Lamm, CEOH. (a) The Neonate and Perchlorate Exposure. A Literature Review Relevant to Environmental Perchlorate Exposures and the Full-Term and Premature Newborn (5/21/04). (b) The Neonate and Perchlorate Exposure. A Literature Review Relevant to Environmental Perchlorate Exposures and the Full-Term and Premature Newborn (updated 5/24/04).

111. Braverman, L. E-mail received from Lewis Braverman, Boston Medical Center, on May 21, 2004, regarding abstracts to be submitted to the American Thyroid Association. (a) Abstract: Braverman et al. The Effect of Perchlorate, Thiocyanate, and Nitrate on Thyroid Function in Long-Term Workers Exposed to
Perchlorate. (b) Abstract: Braverman et al. The Effect of Low Dose Perchlorate for Six Months on Thyroid Function in Normal Volunteers.

112. Dourson, M. E-mail received from Michael Dourson, TERA, on May 24, 2004, regarding update on Chilean study of perchlorate exposure. (a) Study of Pregnant Women in Three Cities in Northern Chile With Varying Levels of Environmental Perchlorate Exposure, (b) Figures: Urine iodide in a sample of 100 pregnant women living in Boston and 171 pregnant women living in Northern Chile; Maternal Free T4; Maternal TSH, (c) Study of the Thyroid Status among Pregnant Women in Northern Chile.


117. Gibbs, J. 2004. Presentation to the Committee to Assess the Health Implications of Perchlorate Ingestion. Slides (and discussion) of presentation made to committee on May 24, 2004, in Woods Hole, MA. Abstract of Tellez et al., Chronic Environmental Exposure to Perchlorate in Drinking Water and Thyroid Function During Pregnancy and the Neonatal Period.

118. Borak, J. 2004. Presentation to the Committee to Assess the Health Implications of Perchlorate Ingestion. Slides of presentation made to committee on May 24, 2004, in Woods Hole, MA.


123. Lamm, S. E-mail received from Steve Lamm, CEOH, on May 26, 2004, regarding a review of the literature on neurocognitive deficits and mild iodine deficiency. Attachments – (a) Degree of Iodine Deficiency and Neurocognitive Performance: A Review of the Literature. (b) Table 2: Studies with no supplemented groups categorized in terms of units of UIE (μg I/L, μg I/g Cr, μg I/day) and iodine status. Arrows indicate change in UIE over time (due to supplementation or national iodization programs).

124. Lamm, S. E-mail received from Steve Lamm, CEOH, on June 15, 2004, regarding error in sections relevant to the neonatal/premature infant glomerular filtration rate.

125. Borak, J. E-mail received from Jonathan Borak, Yale University, on June 15, 2004, regarding error in the sections relevant to the neonatal/premature infant glomerular filtration rate in May 24, 2004 presentation to the NRC committee.


127. Transcript of the Fourth Meeting of the NAS Committee to Assess the Health Implications of Perchlorate Ingestion (May 24, 2004). NOTE: This is an unedited verbatim transcript of the fourth meeting of the Committee to Assess the Health Implications of Perchlorate Ingestion and is not an official report of National Academy of Sciences, National Academy of Engineering, Institute of Medicine, or National Research Council (collectively “National Academies”). Opinions and statements included in the transcript are solely those of the individual persons or participants at the meeting, and are not necessarily adopted or endorsed or verified as accurate by the National Academies.

128. Letter received from Dr. John Gibbs, Kerr-McGee Corporation, to Dr. Richard Johnston, on July 13, 2004. Attachments: (a) Comments to the Committee to Assess the Health Implications of Perchlorate Ingestion [BEST-K-03-05-A] Regarding Human Studies of the Effect of Thiocyanate on Thyroid Function are Relevant to Perchlorate Risk Assessment – A Short Communication. Submitted

129. Borak, J. E-mail received from Jonathan Borak, Yale University, on July 20, 2004. Memorandum regarding error in May 24, 2004 presentation to the NRC committee.


131. Jacobs, M. E-mail from Micki Jacobs regarding effects of dermal contact and inhalation of shower fumes. Received July 25, 2004.

132. York, R. Digital images from Dr. Raymond York, Argus Laboratories, of the perchlorate-treated rat that had sections of two levels of the thyroid gland. Received July 6, 2004.

133. Lamm, S. E-mail from Steven Lamm, CEOH, to Ellen Mantus, NAS, regarding revised submission to the NAS panel. Received July 26, 2004. (a) Letter from Dr. Steven Lamm to Dr. Ellen Mantus, dated July 26, 2004, regarding error in the perchlorate pharmacokinetic modeling that was submitted to NAS panel on May 24, 2004. (b) A Literature Review Relevant to Environmental Perchlorate Exposures and the Full-Term and Premature Newborn. July 26, 2004.

134. Gibbs, J. E-mail from John Gibbs, Kerr-McGee Corporation, to Ellen Mantus, NAS, regarding latest draft of RAIU study in perchlorate workers. Received July 26, 2004. (a) Letter from Dr. John Gibbs to Dr. Richard Johnston, regarding current draft of The Effect of Perchlorate, Thiocyanate, and Nitrate on Thyroid Function in Long-Term Workers Exposed to Perchlorate. (b) Braverman et al. 2004. The Effect of Perchlorate, Thiocyanate, and Nitrate on Thyroid Function in Long-Term Workers Exposed to Perchlorate. July 25, 2004.


Full-Term and Premature Neonates. Intertox, Inc. Seattle, WA. Prepared on behalf of the Perchlorate Study Group.


139. Crump, K. Table 2: BMD Estimates and Corresponding BMDL for Perchlorate. Received June 11, 2004.


145. Guth, D. E-mail received from Dan Guth, The Boeing Company, regarding analysis of the thyroid hormone and TSH changes observed in the rat studies used in the EPA risk assessment. (a) Goodman, G. August 31, 2004. The Iodine-Dependence of Perchlorate Effects on Thyroid Hormones in Rats: Review and


149. Fisher, J. E-mail from Jeffrey Fisher, The University of Georgia, to Richard Corley, regarding dietary iodide PBPK modeling paper. Attachment – Fisher, J.W., Campbell, J.L., and Guth, D. A Human Dietary Iodide PBPK Model to Evaluate the Effects of Perchlorate on Thyroidal Iodide Content. This paper is being submitted by the authors(s) for publication.
