

Jill Ryer-Powder, Ph.D., D.A.B.T.**Principal, Health Sciences**

Environmental Health Decisions
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Education

Ph.D., Toxicology, Rutgers University, Piscataway, New Jersey, 1987
B.S., Nutrition, Cornell University, Ithaca, New York, 1982
M.S., Nutrition Science and Policy, Tufts University, 2019

Certifications and Specialized Training

Diplomate of the American Board of Toxicology, Certified 1990, 1995, 2000, 2005, 2010, 2015, and 2020
Graduate Certificate Program – Nutrition Science for Health Professionals, Tufts University, 2016
Post-Doctoral Scholar, Childrens Hospital of Los Angeles/University of Southern California, 1988

Professional Profile

Dr. Ryer-Powder is the Principal Health Scientist at Environmental Health Decisions. She brings more than 30 years of experience in human health risk assessment, litigation support, Proposition 65 evaluation, and occupational toxicology to human health hazard and evaluation projects. In her position, Dr. Ryer-Powder is responsible for strategic preparation, project management, and evaluation of chemical toxicity for risk assessment and product hazard evaluation projects. She is called upon to investigate and analyze legal and regulatory issues and controversial claims regarding chemical causation of diseases in humans. Her solid technical background, coupled with her frequent involvement in risk and hazard evaluation projects, gives her a broad perspective on the technical, economic and regulatory considerations for human health hazard evaluation work.

Dr. Ryer-Powder's expertise is in providing human health hazard evaluations work to private-sector clients. Dr. Ryer-Powder was a pioneer in the development of safe exposure levels for petroleum fuels and ammonia. She has extensively researched the toxicological issues surrounding human exposures to lead, ammonia, chlorinated hydrocarbons, pesticides, hexavalent chromium, arsenic, and petroleum hydrocarbons. In her experience in evaluating potential hazards from chemicals, she has worked extensively with the Office of Environmental Health Hazard Assessment, USEPA Region IX, Cal/EPA Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, San Diego Regional Water Quality Control Board, County of Santa Barbara, Orange County Health Care Agency, Nevada DEP, and Arizona DEQ. Negotiations have involved presentation and approval of health risk assessments, health-based cleanup levels, and the setting of safe levels of exposure in the occupational and public arena. Dr. Ryer-Powder was recently invited to serve on the Lead Exposure and Prevention Advisory Committee of the Centers for Disease Control and Prevention. She is also currently on the Board of Directors for the American Board of Toxicology.

Dr. Ryer-Powder has managed and performed more than 100 health risk assessments for local and national clients. Her site experience includes Preliminary Endangerment Assessment risk assessments, Proposition 65 evaluations, federal and state Superfund sites, Manufactured Gas Plant sites, RCRA sites, and Brownfields sites. She has prepared and reviewed hundreds of Material Safety Data Sheets (MSDSs) and product labels for consumer and industrial products, including

Chemical Expertise

Heavy Metals
Petroleum Hydrocarbons
Aromatic Chemicals
Chlorinated Hydrocarbons
Pesticides
PCBs
Perchlorate
Ammonia
Ozone

Technical Expertise

Human Health Risk
Assessment
Vapor Intrusion Risk
Assessment
Proposition 65 Analysis
Dose-Response Assessment
Exposure Assessment
Development of Occupational
Exposure Limits
Development of Material
Safety Data Sheets and
Product Labels

Overall Capabilities

Risk Assessment
Risk Communication
Litigation Support
Expert Testimony
Occupational Hygiene and
Toxicology
Product Safety Evaluation
Air Quality Issues

petroleum fuels, solvents, metals, fertilizers, pesticides, adhesives, and fabric protectors. She has worked with trade associations, private industry, and regulatory agencies to develop safe exposure levels to petroleum products and ammonia. She has also provided expert testimony in cases involving exposure to chlorinated hydrocarbons, petroleum hydrocarbons, polycyclic aromatic hydrocarbons, and metals. Dr. Ryer-Powder lectures on the subject of risk assessment to students in the University of California system.

Project Experience

Vapor Intrusion Health Risk Assessments. Performed Vapor Intrusion to Indoor Air evaluations for chemicals (petroleum hydrocarbons and volatile organic chemicals) in soil gas and groundwater for multiple sites in California and Nevada. Prepared risk assessment reports for submission to attorneys, property developers, banks, and government agencies.

Proposition 65 Evaluations. Performed Proposition 65 evaluations for lead in candy, supplements, clothing, and other consumer products. Analyzed data and prepared reports with findings. Determined the need for warnings.

Senior Toxicologist in Preparation of Multimedia Multipathway Screening Human Health Risk Assessment. For the City of Irvine, developed health-based cleanup levels and performed a screening risk for more than 700 locations at the El Toro Marine Corps Air Station.

Senior Toxicologist in Preparation of Multimedia Multipathway Human Health Risk Assessment. For the Brown and Bryant Task Force, prepared a Human Health Risk Assessment and developed health-based cleanup goals for a former pesticide manufacturing plant in Shafter, CA. This site will be developed into commercial property. Provided services including negotiations with DTSC.

Senior Toxicologist / Risk Assessor in Preparation of Health Risk Assessment / Risk Communication. For City of Riverside, evaluated potential for health effects from PCBs present at a site surrounded by a residential area. Looking at previous uses of the site and relevant exposures. Evaluated potential exposures to previous employees. Presented information at public meetings.

Senior Toxicologist in Preparation of Multimedia Multipathway Human Health Risk Assessment. For Home Depot, prepared a Human Health Risk Assessment and developed health-based cleanup goals for a site in Burbank, CA. This site, a former manufacturing facility, will be developed into a Home Depot. Provided services including negotiations with OEHHA, the LARWQCB, and the City of Burbank. Risk assessment was approved by OEHHA.

Senior Toxicologist in Preparation of Multimedia Multipathway Human Health Risk Assessment. For Property Development company, prepared a Human Health Risk Assessment and developed health-based cleanup goals for a site in Irvine, CA. This site, which was the former Parker Hannifin Facility, will be developed for residential and commercial use. Provided services including negotiations with City of Irvine. Risk assessment was approved by the City of Irvine.

Lead Author in Preparation of Preliminary Endangerment Risk

Risk Assessment

Assessments for School Sites. For the San Marcos School District, prepared a Preliminary Endangerment Risk Assessment to evaluate the safety of building a school at a former farm site. Evaluated the exposure potential and toxicity of metals, nitrates, and pesticides.

For the LA Unified School District, prepared a Preliminary Endangerment Risk Assessment to evaluate the safety of building a school at a former gasoline station / auto repair shop site. Evaluated the exposure potential and toxicity of TPH and metals.

For the LA Unified School District, prepared several Preliminary Endangerment Risk Assessments to evaluate the safety of building a school at a former gasoline stations, former auto repair shop sites, and a former furniture manufacturing site. Evaluated the exposure potential and toxicity of TPH, VOCs, SVOCs, and metals. Included a school child and school teacher scenario.

Lead Author in Preparation of Several Preliminary Endangerment Risk Assessments. For several clients in Northern and Southern California, prepared Preliminary Endangerment Assessment risk evaluations for sites including former oil fields, former gasoline stations, and former dry cleaners.

Lead Author in Preparation of Several Risk-Based Corrective Action (RBCA) Risk Assessments. For several clients in Northern and Southern California, prepared RBCA risk assessments.

Project manager and Senior Risk Assessor in the planning, creation, and negotiation of a risk assessment for the U.S. Army Corps of Engineers Kingman Army Airfield Site. For the Army Corps of Engineers, prepared a risk assessment to address metals and ammonia at the Formerly Used Defense Site (FUDS) Kingman Army Airfield facility in Kingman, Arizona. The risk assessment followed USEPA, Arizona Department of Environmental Quality, and US Army Corps of Engineers risk assessment guidance. Included both residential and worker receptors.

Senior scientist in Preparation of Several Risk Assessments to Evaluate Proposition 65 Compliance. Prepared risk assessments for a church, daycare center, and several commercial facilities to evaluate the need for a Proposition 65 warning. Chemicals included both carcinogens and reproductive toxicants. Performed air modeling to determine concentrations of Proposition 65 chemicals inside buildings. Performed Proposition 65 analysis on chemicals in fabrics, toys, and food.

Senior scientist in preparation of risk assessments for land involved in the Alameda Corridor. Assisted in preparation of several risk assessments for land to be used for the Alameda Corridor. Involved assessment of former manufacturing sites with chemicals including solvents, petroleum hydrocarbons, and metals.

Project manager and Senior risk assessor in the planning, creation and negotiation of a risk assessment for a state Superfund remedial action plan for a site in Escondido, California. The client group was represented by approximately 50 Potentially Responsible Parties. This risk assessment was the first using Monte Carlo that has been accepted by the California

Department of Toxic Substances Control. Was invited to present at the Risk Assessment Advisory Committee to discuss the methodology used in the risk assessment. Continued work to assess potential for health effects from presence of 1,4-dioxane in groundwater.

Senior risk assessor for Stringfellow Site in Glen Avon, California.

Evaluated the potential for adverse health effects at Stringfellow Site. Risk assessment was submitted to and accepted by USEPA Region 9. Groundwater chemicals included various volatile organic compounds (VOCs) and heavy metals such as cadmium, nickel, chromium, and manganese. Soil chemicals included pesticides, polychlorinated biphenyls (PCBs), sulfates, and heavy metals.

Project manager and Senior risk assessor for the preparation of a risk assessment for the Unocal Ammonia Plant in Kenai, Alaska.

Prepared risk assessment in compliance with air permitting process for the State of Alaska. Worked with the State of Alaska Department of Environmental Control.

Lead toxicologist in the development of health-based concentration goals for various media contaminated with middle-distillate petroleum constituents that had leaked from underground pipes in Guadalupe, California.

Performed work for Unocal Corporation. Site consisted of a beach and an inland recreational area. The potentially impacted media includes soils, surface water (an inland lagoon used for kayaking and a beach used for surfing and other recreational uses) and groundwater. Personally developed the toxicity value to represent the range of petroleum constituents identified at the site as well as some exposure parameters that were unique to populations at the site. The resulting clean-up goal was less than the agency's default value used for Total Petroleum Hydrocarbon cleanup. Agencies involved included the California Department of Toxic Substances Control and Water Quality Control Board - Central Region. In 2002, prepared a revised health risk assessment for the Site based on new data.

Project manager for over 50 national and California-based health risk assessments for soil and/or groundwater contaminated with volatile organic compounds, metals and petroleum hydrocarbons.

Sites included manufactured gas plant sites, dry-cleaning facilities, recycling facilities, gas and electric company facilities, and oil refineries. Worked with the California Department of Toxic Substances Control and several Regional Water Quality Control Boards to help obtain closure of these sites.

Senior scientist in the development of toxicity profiles and safe exposure levels for crude oil, diesel fuel, diluent, lubricating oil, and mineral spirits.

Used the safe exposure levels in several risk assessment projects to obtain cleanup levels that were higher than the default value used by regulatory agencies for Total Petroleum Hydrocarbons. These toxicology profiles were published as chapters in the second edition of *Clinical Principles of Environmental Health*.

Senior scientist for the preparation of comments regarding the Reference Dose of Ammonia.

Participated as a representative for Unocal Corporation in a task force through The Fertilizer Institute in the preparation of a document entitled *Health Effects of Ammonia* and submitted comments regarding the Reference Dose to the U.S. Environmental Protection Agency. In 2014, presented to USEPA's Scientific Advisory Board regarding safe levels of ammonia in air.

Senior scientist for the preparation of report regarding Perchlorates in fertilizer. Prepared a report regarding the potential for adverse health effects from perchlorates in fertilizer.

Senior scientist for the preparation of comments regarding the use of risk assessment in setting Threshold Limit Values. Prepared and submitted comments on behalf of Unocal Corporation to the Occupational Health and Safety Administration.

Senior scientist for the preparation of comments regarding the National Research Council's Community Emergency Exposure Level for Ammonia. Prepared and submitted comments on behalf of The Fertilizer Institute to the National Research Council.

Project manager for the review and/or preparation of hundreds of MSDSs and product labels for consumer and industrial products. Chemicals have included petroleum products (Unocal Corporation, Witco), solvents (Micronova Inc.), agricultural products (Unocal Corporation, Valent USA, IMC Global, CF Industries), adhesives (Loctite Corp.), metals (Unocal Corporation), cosmetics (Arsynco), resins (3D Systems), glass products (Allwaste), and fabric protection products (Guardian Inc.). Prepared hazard evaluations for each chemical component of every product. Work required an understanding of all regulatory information required for MSDS and label preparation (including OSHA, TSCA, VOC regulations, RCRA, CERCLA, DOT, and Proposition 65). Performed all work under the scrutiny of the Occupational Health and Safety Administration.

Senior scientist for the preparation of comments regarding the California Office of Health Hazard Assessment's (OEHHA) Determination of Acute Toxicity Exposure Levels for Airborne Toxicants. Focused on the level derived for ammonia. Submitted comments to OEHHA on behalf of Unocal Corporation.

Serving as an expert witness in a case involving childhood exposure to lead in Peru. Preparing expert report for exposure and potential health effects from exposure to children from a lead smelter.

Served as an expert witness in a case involving residential exposures to lead. Prepared expert reports, gave depositions, and provided testimony regarding health effects from exposures to lead. Gained approval of the use of the IEUBK model in predicting blood lead levels of children.

Served as an expert witness in a case involving exposures to school children of trichloroethylene in indoor air.

Served as an expert witness in a case involving potential exposures to arsenic. Prepared expert reports and gave depositions regarding potential exposures to arsenic at a ranch. Researched the site-specific bioavailability of arsenic.

Served as an expert witness in a case involving residential exposures to hexavalent chromium. Prepared expert report and testified regarding exposures and potential health effects from the presence of hexavalent chromium in soil, air, and groundwater.

Occupational Toxicology

Litigation Support

Served as an expert witness in a case involving residential exposures on a former oil storage site. Prepared expert report and testified regarding exposures and potential health effects from the presence of petroleum hydrocarbons and BTEX in soil, air, and groundwater.

Served as an expert witness in a case involving employee exposure to Diacetyl in a Popcorn Plant. Prepared reports and provided a deposition regarding MSDS warnings and potential for health effects from exposures to diacetyl.

Served as an expert witness in a case involving contamination from acid sludge seeps. Prepared reports, provided a deposition, and testified regarding potential for health effects from exposures to acid sludge seeps. Chemicals of potential concern were polycyclic aromatic hydrocarbons.

Served as an expert witness in a case involving migration of gasoline under a residential area. Testified regarding potential for health effects from exposure to benzene, toluene, ethylbenzene, and xylene. Evaluated potential toxicity and routes of exposures.

Served as an expert witness in a case involving alleged exposure n-hexane and potential association with neurological diseases.

Served as an expert witness in a case involving exposure in agricultural activities and potential association with pulmonary fibrosis.

Served as an expert witness in a case in Fresno, CA where a determination of contribution to total risk needed to be established for pesticides, metals, and solvents. Prepared a risk assessment using all detected chemicals in the groundwater – determined the percent contribution to risk and hazard from the chemicals – developed toxicological profiles for chemicals that drove the risk assessment.

Served as an expert witness in a case in Los Angeles, CA where potential health effects of lead needed to be established at the Gautier Site. Peer-reviewed a risk assessment for the Gautier Site in Los Angeles. Deposed regarding potential health effects of lead. Provided testimony regarding the surrounding residential use and agricultural use

Served as an expert witness in a case in San Diego where humans and rabbits were exposed to chlorinated hydrocarbons that had leaked from a landfill into the water supply. Demonstrated that the levels of chemicals to which the humans and rabbits were exposed could cause the adverse health effects experienced by the humans and rabbits.

Served as an expert witness in a case involving human exposure to an aniline derivative. An explosion in a cosmetics plant (Arsynco) released the aniline derivative into the atmosphere. Personally recreated the exposure scenario and developed a safe dose for the aniline derivative to demonstrate that the level that the plaintiff was exposed to was not adequate to account for the claimed health effects.

Served as an expert witness in a case involving human exposure to ammonia. Ammonia was released into a residential area in New Mexico following a railcar accident. Several residents were claiming various adverse health effects. Helped recreate the exposure scenario and determine if concentrations to which residents were exposed could cause the claimed health effects.

Participated in a Dose-Comparison study created to characterize the environmental fate of chemicals allegedly at issue for a large paper producer. Evaluated the potential public health concerns relating to those feasibly emitted from the facility. The study demonstrated that the maximum exposures at issue were insufficient to cause the alleged health effects.

Served as an expert witness in two cases involving the potential for health effects and environmental effects. One case involved the Insilco site located in Vernon, California, and the other case involved the Sheila Street site in the City of Commerce, California. Successfully demonstrated that a cleanup was not necessary for the protection of human health and the environment.

Served as Toxicologist on Air Quality Issues in West Los Angeles.

At an oil drilling site in West Los Angeles, provided services to evaluate emissions from the drilling rig and potential health effects on surrounding community.

Served as Toxicologist on Air Quality Issues in Chula Vista.

For a future development in Chula Vista, providing services to evaluate potential health effects from emissions from local facility.

Served as Toxicologist on Air Quality Issues in Montana.

For a waste incinerator facility, providing services to evaluate potential health effects from emissions when tires are burned at the facility. Preparing sections for Environmental Impact Report.

Air Quality Issues

Record of Employment

1999 – Pres., Principal Health Scientist, Environmental Health Decisions
1998 – 1999, Principal Health Scientist, Waterstone Environmental, Inc.
1997 - 1998, Supervising Health Scientist, McLaren/Hart, Inc.
1994 - 1997, Manager, Health Sciences, Environ Corp.
1992 - 1994, Senior Health Scientist, McLaren/Hart, Inc.
1988 - 1992, Supervisor, Product Safety Evaluation, Unocal Corporation
1987 - 1988, Children's Hospital of Los Angeles, Research Associate

Professional Affiliations

American College of Toxicology
Society of Toxicology
Southern California Society of Toxicology (President, 1999-00)
Society for Risk Analysis
Sigma Xi
American Chemical Society

Awards and Honors

Invited to serve on the Lead Exposure and Prevention Advisory Committee of the Centers for Disease Control and Prevention, 2019
Elected to the Board of Directors of the American Board of Toxicology, 2019
Invited to serve on expert panel for the Crohn's and Colitis Foundation, 2016
Sigma Xi, Rutgers University, 1988
Who's Who of American Women, 2000

Publications, Presentations, and Abstracts**Publications*****Petroleum Hydrocarbons***

Lambert, C.E., Molenaar, D., Clark, C.R., and Ryer-Powder, J.E. (2001) Crude Oil. Clinical Environmental Health and Toxic Exposures, Second Edition. John B. Sullivan, Jr. and Gary R. Krieger, Eds.

Clark, C.R., Ryer-Powder, J.E., Lambert, C.E., and Molenaar, D. (2001) Middle distillate and Residual Fuels. Clinical Environmental Health and Toxic Exposures, Second Edition. John B. Sullivan, Jr. and Gary R. Krieger, Eds.

Molenaar, D., Clark, C.E., Lambert, C.E., and Ryer-Powder, J.E. (2001) Petroleum Lubricants, Asphalt and Coke. Clinical Environmental Health and Toxic Exposures, Second Edition. John B. Sullivan, Jr. and Gary R. Krieger, Eds.

Ryer-Powder, J.E., LaPierre, A., and Scofield, R. (1997) Derivation of a Reference Dose for a Complex Petroleum Hydrocarbon Mixture. Proceedings of the 1997 Petroleum Hydrocarbons & Organic Chemicals in Ground Water: Prevention, Detection, and Remediation Conference. 1997 Ground Water Publishing Company. ISSN: 1047-9023.

Ryer-Powder, J., Scofield, R., LaPierre, A, Lambert, C. (1996) Determination of Safe Levels of Total Petroleum Hydrocarbons as Crude Oil in Cattle's Drinking Water and in Meat From Cattle. The Proceedings of the 1996 Petroleum Hydrocarbons & Organic Chemicals In Ground Water: Prevention, Detection, and Remediation. Houston, Texas.

Ryer-Powder, J.E. and Sullivan, M.J. (1994) Update on the Derivation of an Oral Reference Dose for Diesel Fuel Number 2. 1993 Principles and Practices for Diesel Contaminated Soils, Volume 3, Chapter 2.

Ammonia

Clement Associates Incorporated. (1990) Health Effects Assessment for Ammonia. Prepared for The Fertilizer Institute, Washington, DC.

Ryer-Powder, J.E. (1991) Health Effects of Ammonia. Volume 31: Ammonia Plant and Related Facilities Safety – American Institute of Chemical Engineers, NY.

Ozone and Free Radicals

Ryer-Powder, J.E. and Forman, H.J. (1989) Adhering Lung Macrophages Product Superoxide Demonstrated With Desferal-Mn(IV). *Free Radical Biology and Medicine*. 6, 513-518.

Amoruso, M.A., Ryer-Powder, J.E., Warren, J., Witz, G., Goldstein, B.D. (1989) Effects of Ozone on the Production of Active Bactericidal Species by Alveolar Macrophages. *Atmospheric ozone Research and its Policy Implications. Proceeding of the 3rd US – Dutch International Symposium, Nijmegen, The Netherlands – Atmosphere Ozone Research and its Policy Implications*. 501-511.

Ryer-Powder, J.E., Amoruso, M.A., Czerniecki, B., Witz, G., and Goldstein, B.D. (1988) Inhalation of Ozone Produces a Chronic Granulomatous Disease-Like Alteration in Mouse Alveolar Macrophages. *American Review of Respiratory Disease*. 138:1129-1133.

Witz, G., Lawrie, N.J., Goldstein, B.D., Ryer-Powder, J.E., and Amoruso, M.A. (1988) Effects of Alpha; Beta – Unsaturated Aldehydes on Macrophage and Neutrophil Membrane Function, Fluidity, and Sulfhydryl Status. *Oxygen Radicals in Biology and Medicine*. Ed. Simic, M., Taylor, K. Ward, J., and Von Sonntag, C. p. 849-851.

Ryer-Powder, J.E., Witz, G., Goldstein, B.D., and Amoruso, M.A. (1986) In Vivo Effects of Ozone on Rat Alveolar Macrophage Plasma Membrane Surface Sulfhydryl Groups. *Annals of the New York Academy of Sciences*. 259: 73-74.
Amoruso, M.A., Ryer, J.E., Easton, D., Witz, G., and Goldstein, B.D. (1986) Estimation of Risk of Glucose 6-Phosphate Dehydrogenase Deficient Red Cells to Ozone and Nitrogen Dioxide. *J. Occup. Med.* 28(7), 473-479.

Presentations

Petroleum Hydrocarbons and Volatile Organic Chemicals

Ryer-Powder, J.E. (2017) Update on Petroleum Vapor Intrusion. 19th Annual CUPA Forum. San Diego, CA.

Ryer-Powder, J.E. (2017) Overview of Products Present at Nail Salons, Chemicals in Products, and Potential Exposures and Health Effects. Department of Toxicology and Substance Control. Forum on Health Effects to Nail Salon Workers. Sacramento, CA.

Ryer-Powder, J.E., LaPierre, A., and Scofield, R. (1997) Derivation of a Reference Dose for a Complex Petroleum Hydrocarbon Mixture. *Proceedings of the 1997 Petroleum Hydrocarbons & Organic Chemicals in ground Water: Prevention, Detection, and Remediation*. Houston, Texas.

Ryer-Powder, J., Scofield, R., LaPierre, A, Lambert, C. (1996) Determination of Safe Levels of Total Petroleum Hydrocarbons as Crude Oil in Cattle's Drinking Water and in Meat From Cattle. *1996 Petroleum Hydrocarbons & Organic Chemicals In Ground Water: Prevention, Detection, and Remediation*. Houston, Texas.

Ryer-Powder, J.E., Custance, S.R., Sullivan, M.J. (1993) Determination of Reference Doses of Mineral Spirits, Crude Oil, Diesel Fuel Number 2, and Lubricating Oil. Society of Petroleum Engineers, 68th Annual Technical Conference and Exhibition, Houston, Texas. October 3-6, 1993.

Ammonia

Ryer-Powder, J.E. (1990) Health Effects of Ammonia. American Institute of Chemical Engineers, 35th Ammonia Symposium - Safety in Ammonia Plants and Related Facilities. San Diego, California.

Ozone

Ryer-Powder, J.E., Witz, G., Goldstein, B.D., and Amoruso, M.A. (1986) In Vivo Effects of Ozone on Rat Alveolar Macrophage Plasma Membrane Surface Sulfhydryl Groups. Meeting of the New York Academy of Sciences, New York, NY.

Risk Assessment

Ryer-Powder, J. 2014. Elements and Applications for Human Health Risk Assessments. Southern California Joint Technical Symposium. October.

Ryer-Powder, J. (1998, 1999, 2000, 2001, 2002) Risk Assessment – Methodology. Lecture to University of California-Irvine. Anaheim, California.

Ryer-Powder, J. (1998, 1999) Risk Assessment – Methodology. Lecture to University of Southern California Toxicology Students. Los Angeles, California.

Ryer-Powder, J., Gaynor, K., and Paustenbach, D. (1998) Update of Methods to Derive Ambient Air Limits. Society of Toxicology, Seattle, Washington.

Ryer-Powder, J. (1997) Risk Assessment – Methodology. Lecture to University of California - Irvine. Anaheim, California.

Ryer-Powder, J.E., DiZio, S., Schum, M., Harris, P., Curley, W., Scofield, R. (1996) Use of Monte Carlo (MC) Analyses in a Multi-Chemical, Multi-Pathway Human Health Risk Assessment (HHRA) for a State Superfund Site (Part 1 of 4). Society of Toxicology, Anaheim, California.

LaPierre, A., DiZio, S., Schum, M., Wong, K., Ryer-Powder, J.E., Curley, W., and Scofield, R. (1996) Site-Specific Exposure Distributions for a State Superfund Human Health Risk Assessment (HHRA) (Part 2 of 4). Society of Toxicology, Anaheim, California.

Harris, P., DiZio, S., Schum, M., Ryer-Powder, J.E., Curley, W., and Scofield, R. (1996) Health-Based Cleanup Levels Using Monte Carlo (MC) Analysis of Exposure Distributions (Part 3 of 4). Society of Toxicology, Anaheim, California.
Curley, W., DiZio, S., Ryer-Powder, J.E., Schum, M., and Scofield, R. (1996) Risk Management Decisions Using Monte Carlo Risk Assessment (Part 4 of 4). Society of Toxicology, Anaheim, California.

Ryer-Powder, J.E. and Scofield, R. (1996) Risk-Based Corrective Action. Presented as a course sponsored by Environ Corporation. Irvine, California.

Ryer-Powder, J.E., Jain, S., Chou, G., and Scofield, R. (1995) Use of Air Modeling and the Determination of a Reference Concentration to Assess the Potential for Adverse Health Effects from the Release of 2-Nitro-N (2-Hydroxyethyl) Aniline. Society for Risk Analysis., Honolulu, Hawaii.

Ryer-Powder, J.E. (1995) Methods for Developing Target Cleanup Levels. 1995 Series - Environ Short Courses. Costa Mesa, California.

Scofield, R., Ryer-Powder, J.E., and LaPierre, A. (1994) Probabilistic Risk Assessment and CalTOX. 1994 Environ Short Courses. Costa Mesa, California.

Ryer-Powder, J.E., Custance, S.R., Sullivan, M.J. (1993) Determination of Reference Doses of Mineral Spirits, Crude Oil, Diesel Fuel Number 2, and Lubricating Oil. Society of Petroleum Engineers, 68th Annual Technical Conference and Exhibition, Houston, Texas. October 3-6, 1993.

Abstracts

Petroleum Hydrocarbons

Ryer-Powder, J., Curley, W, and Scofield, R. (1996) Derivation of a Reference Dose for a Complex Petroleum Hydrocarbon Mixture. Society for Risk Analysis, New Orleans, LA.

Ryer-Powder, J., Scofield, R., LaPierre, A, Lambert, C. (1996) Determination of Safe Levels of Total Petroleum Hydrocarbons as Crude Oil in Cattle's Drinking Water and in Meat From Cattle. The Proceedings of the 1996 Petroleum Hydrocarbons & Organic Chemicals In Ground Water: Prevention, Detection, and Remediation. Houston, Texas.

Ryer-Powder, J.E., Conforti, K., Custance, S.R., Sullivan, M.J. (1993) Risk Assessment of a Site Involving Exposure to Natural Tar Seeps. Society for Risk Analysis. December, 1993.

Ryer-Powder, J.E., Custance, S.R., Sullivan, M.J. (1993) Determination of Reference Doses for Crude Oil, Diesel Fuel, and Lubricating Oil. Society for Risk Analysis. December, 1993.

Ryer-Powder, J.E., Conforti, K., Custance, S.R., Sullivan, M.J. (1993) Risk Assessment of a Site Involving Exposure to Natural Tar Seeps. Society for Risk Analysis. Savannah, Georgia. December 5-8, 1993.

Sohn, M.D., Deseran, T.M., Custance, S.R., Ryer-Powder, J.E., Sullivan, M.J. (1993) An Alternative Approach to Protecting Ground Water from the Impact of Volatile Organic Compounds in Soil. National Ground Water Association - Petroleum Hydrocarbons and Organic Chemicals in Ground Water: Prevention, Detection, Restoration. Houston, Texas. November 10-12, 1993.

Ryer-Powder, J.E., Sohn, M.D., Custance, S.R., Sullivan, M.J. (1993)

Environmental and Human Health Concerns of Crude Oil. National Ground Water Association - Petroleum Hydrocarbons and Organic Chemicals in Ground Water: Prevention, Detection, Restoration. Houston, Texas. November 10-12, 1993.

Ryer-Powder, J.E., Custance, S.R., Sullivan, M.J. (1993) Determination of Reference Doses of Mineral Spirits, Crude Oil, Diesel Fuel Number 2, and Lubricating Oil. Society of Petroleum Engineers, Houston, Texas. October 3-6, 1993.

Ryer-Powder, J.E., Malott, D.M., Sullivan, M.J. (1993) Update on the Derivation of an Oral Reference Dose for Diesel Fuel No. 2. Council for the Health And Environmental Safety of Soils - Eighth Annual Conference on Contaminated Soils. Amherst, Massachusetts. September 20-23, 1993.

Custance, S.R., Ryer-Powder, J.E., Sohn, M.D., Crofts, D., Rietzel, R., Sullivan, M.J. (1993) Evaluation of Diesel in Soil and Groundwater Using Environmental Fate and Transport Modeling: A Case Study. Council for the Health And Environmental Safety of Soils - Eighth Annual Conference on Contaminated Soils. Amherst, Massachusetts. September 20-23, 1993.

Ryer-Powder, J.E., Custance, S.R., Sullivan, M.J. (1993) Derivation of a Reference Dose for Highly Refined Lubricating Oils. Society of Toxicology. March, 1993.

Volatile Organic Compounds

Ryer-Powder, J.E., Morabito, E., Smith, E., Dagdigian, J. (1999) Comparison of Estimated Indoor Air Chemical Concentration Results From Fate and Transport Modeling Versus Surface Flux Measurements. Society of Toxicology, New Orleans, Louisiana. March, 1999.

Sohn, M.D., Custance, S.R., Ryer-Powder, J.E., Sullivan, M.J. (1993) Comparison of Measured and Predicted Trichloroethylene Concentrations in Soil Gas Resulting From Groundwater. National Groundwater Association - Chlorinated Volatile Organic Compounds in Ground Water. Kansas City, Missouri. October 17-20, 1993.

Deseran, T.D., Sohn, M.D., Custance, S.R., Ryer-Powder, J.E., Sullivan, M.J. (1993) Protecting Groundwater from the Impact of Volatile Organic Compounds in Soil Using Environmental Fate and Transport Modeling and Risk Assessment. National Groundwater Association - Chlorinated Volatile Organic Compounds in Ground Water. Kansas City, Missouri. October 17-20, 1993.

Aniline Derivatives

Ryer-Powder, J.E., Jain, S., Chou, G., and Scofield, R. (1995) Use of Air Dispersion Modeling and the Determination of a Reference Concentration to Assess the Potential for Adverse Health Effects From the Release of an Aniline Derivative. Society For Risk Analysis. December, 1995

Occupational Toxicology

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