

Workshop - 5

Title	Beyond Screening Levels: Ecological Risk Assessment of PFAS in Real-World Ecosystems
Date and time	Sunday, 13 September 2026, 9:00 AM – 12:30 PM
Duration	Half Day
Venue	Adelaide Convention Centre*
Presenter	Philip Goodrum, Ph.D., DABT, Principal Toxicologist, GSI Environmental Inc. USA
Registration Fees	\$ 375 incl GST (The workshop attendees will be provided with a morning tea)

About this workshop

This workshop introduces the principles of ecological risk assessment for PFAS-contaminated sites, providing a practical foundation for evaluating risks to aquatic and terrestrial ecosystems. Participants will explore ecological screening levels, bioaccumulation and food web processes, toxicity reference values, and dose–response approaches, alongside key factors such as habitat use and exposure pathways. Examples of applications of these concepts will be presented in the context of a tiered approach to site investigation and risk characterisation. The session will also address how to quantify and communicate risk and uncertainty to support defensible, risk-based environmental decision-making.

Why Attend?

For many sites where PFAS have been released to the environment, potential risks to ecological receptors can be a driver for remedial action decisions. This workshop is targeting both seasoned practitioners of risk assessment who would like to learn what may be unique or different about PFAS sites, as well as risk managers and decision makers who would like to understand what the key assumptions and data needs that are fundamental to supporting sound risk management decisions.

Workshop attendees will receive

- 3.0 hrs of CPD point
- Presentation slides (as secured PDF) on USB
- A downloadable online resource folder on USB

Workshop Program

Time	Session – Key Topics and Activities
9:00 – 9:10 AM (10 minutes)	Welcome and Introduction, Key objectives of ecological risk assessments, What's different about PFAS sites?
9:10 – 10:00 AM (30 minutes)	Conceptual site models, Tiered approach, Linking receptors and habitat use with exposure assessment
10:00 – 10:15 AM	Morning Tea Break
10:15 – 12:15 PM (120 minutes)	Toxicity reference values, bioaccumulation, risk characterisation, risk communication
12:15 – 12:30 PM (15 minutes)	Q&A and wrap-up

Session topics proposed

- Ecological screening levels and regulatory guidelines, highlighting factors that contribute to variability between federal and provincial/state agencies in Australia, Canada, USA, and European Union
- Modeling bioaccumulation and food web dynamics in aquatic and terrestrial ecosystems
- Toxicity reference values for wildlife, including birds, mammals, amphibians/reptiles
- Dose-response analysis and species sensitivity distributions
- The role of habitat use preferences and foraging ranges in exposure assessment
- Methods for quantifying and communicating risk and uncertainty

Presenter



Philip Goodrum, Ph.D., DABT

Principal Toxicologist
GSI Environmental Inc. USA

Dr. Philip Goodrum is a Principal Toxicologist with GSI Environmental Inc., with 35 years of experience in the health and environmental science fields, working on behalf of both government and private sector clients. He serves on the adjunct faculty of the State University of New York College of Environmental Science and Forestry (SUNY ESF) where he taught a course in environmental risk assessment and currently advises PhD students conducting research on PFAS mixtures toxicology. He is board-certified as a Diplomat in toxicology by the American Board of Toxicology and is also a certified ecologist with the Ecological Society of America. He holds a Bachelor of Science in Environmental Technology from Cornell University, and both a Master's of Science in Water Resources and a Ph.D. in Environmental Engineering from SUNY ESF. He has served on national science advisory committees for the National Academies of Sciences, Engineering, and Medicine (NASEM), USEPA, National Institute of Health, and the Consumer Products Safety Commission on matters related to lead (Pb) exposure and toxicity, heavy metals risk assessment, and the development of environmental models to support national health-protective standards. His current research interests involves risk assessment and risk communication of chemical exposures in the context of medical toxicology and public health policy.

Notes:

(*) Workshop room details will be advised closer to the event date.

(+) Time slots suggested in the program are indicative and may vary slightly based on the final program.

- Delegates are required to bring their laptop to complete hands-on exercises and access workshop resources.
