

**C. Bennett Amos**  
**Senior Scientist**

**Professional Profile**

Mr. Bennett Amos is a Senior Scientist in Exponent's EcoSciences practice. He has 6 years experience in environmental consulting, focused primarily on ecological toxicology and risk assessment. His expertise is in the design and implementation of field investigations involving the sampling of soil, sediment, surface water, and biota in aquatic and terrestrial environments. He prepares work plans, manages sub-contractors, and leads field sampling efforts. He provides technical support to a variety of environmental projects, including aquatic and terrestrial risk assessment, Natural Resource Damage Assessment, RCRA and CERCLA, and various litigation support. He designs, populates, and manipulates databases and spreadsheets for extensive chemical and biological data analysis. He prepares technical reports for delivery to clients and regulatory agencies.

Mr. Amos has extensive experience in field surveys of freshwater, estuarine, and marine systems. The surveys include habitat evaluation, the collection and taxonomic identification of benthic invertebrates, fish, and vegetation, and collection of sediment and surface water for physical and chemical analysis. He has performed aquatic surveys along the Atlantic and Pacific seaboards, the Gulf of Mexico, and Alaska, as well as major rivers such as the Mississippi and Hudson.

Mr. Amos came to Exponent through their acquisition of Menzie-Cura & Associates, Inc. Here, he gained his experience in ecological risk assessment and litigation support. While attending the University of Massachusetts, he worked as a field biologist for a pesticide consulting firm, and was responsible for the day-to-day operation of a certified Massachusetts public water supply analytical laboratory. He assisted in Massachusetts Title V septic system inspections, percolation testing, soil profiling, gravel pit exploration, and lot surveying. He assisted in the construction of artificial wetland sewage treatments systems in the northeastern United States and in South America.

**Academic Credentials and Professional Honors**

B.S., Environmental Science, University of Massachusetts, Amherst, 2002

A.S., Environmental Science Technology, Holyoke Community College (*with honors*), 2000

Phi Theta Kappa National Honors Society

## **Licenses and Certifications**

OSHA Certified Eight-Hour HAZWOPER Annual Refresher Training in Hazardous Waste Operations and Emergency Response, updated annually

## **Presentations**

Kane Driscoll SB, McArdle M, Amos CB, Menzie CA, Coleman A. Development of a database of toxic doses of PAHs to fish. Estuarine Research Federation 2005 Conference, Norfolk, VA, October 16–20, 2005.

Kane Driscoll S, Amos B, McArdle M, Menzie C, Coleman A. Application of Equilibrium Partitioning Sediment Benchmarks (ESBs) for PAH mixtures to manufactured gas plant sites. Poster presentation, Society for Risk Analysis Roundtable Discussion of Emerging and Still Urgent Issues in Risk Analysis, July 14, 2004.

von Stackelberg KE, Butler C, Famely J, Amos B. Risk management for threatened and endangered species at US Army Installations. Society For Risk Analysis Annual Meeting, December 5–8, 2004.

Menzie CA, Amos B, Nelson ML. Relying on natural or enhanced benthic biological barriers for reducing exposure to sediment contamination. Poster presentation, EPRI In-situ Contaminated Sediment Capping Workshop, Cincinnati, OH, May 12–14, 2003.

## **Project Experience**

Performed a literature review on the chemical composition, environmental fate, and toxicological effects of several military-unique compounds, including explosives, propellants, and smokes and obscurants, for use in a generalized risk assessment of U.S. Army training fields.

Designed and implemented a forensic study of residential soils looking for physical markers that would differentiate naturally occurring soils from foundry sand fill. Statistically correlated the ranked probability of foundry sand against chemical composition of soil for source identification.

Assisted in the preparation of an USEPA Small Business Innovative Research grant, which was accepted and funded. Responsible for the research and development of the innovative product, which was designed to deliver remedial materials to contaminated sediment and reduce bioavailability of organic contaminants.

Assisted in a large-scale sediment, surface water, fish, and benthic invertebrate sampling event in support of ecological risk assessments for two CERCLA sites. Sampling was performed in several small freshwater bodies and a major river.

Designed and executed several sediment, surface water, and benthic invertebrate sampling events in freshwater and estuarine systems around former Manufactured Gas Plant sites on major rivers on the Atlantic seaboard and Midwestern United States rivers. Assisted in the analysis of data from these events for a study on bioavailability of MGP-specific contaminants.

Designed and executed various freshwater and estuarine sediment, surface water, benthic invertebrate, and fish sampling events in support of Massachusetts Contingency Plan risk assessments.

Assisted in the design and lead a freshwater and estuarine sediment, surface water, fish, and benthic invertebrate sampling event in support of a CERCLA risk assessment and remediation plan development at a former landfill.

Conducted an extensive literature review and prepared natural/life history summaries for several species of South American fishes in support of litigation on the construction of a paper pulp mill.

Conducted a review of historical documents and prepared an operational and site history summary for a major refinery operation.

Assisted in the planning and execution of a major aquatic survey in support of NRD litigation defense of a major refinery operation. Survey included collection of sediment, surface water, fish, and benthic invertebrate samples from freshwater and estuarine areas.

Performed soil and sediment sampling for deriving regional background contaminant concentrations in support of NRDA litigation for two major refinery operations.

Assisted in a large-scale beach sediment sampling event over one month at sea in Alaska in support of NRDA litigation.

Assisted in the preparation of an Environmental Security Technology Certification Program grant proposal for in-situ treatment of mercury-contaminated sediment. Designed and lead several sediment, surface water, and benthic invertebrate sampling events at Department of Defense installations to collect sediment for supporting laboratory testing.