

A National PFAS Investigation Program in Australia: Sense-Making and Risk Communication Challenges

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Background/Objectives. Per- and poly-fluoroalkyl substances (PFAS) compounds have different characteristics to other contaminants such as extreme persistence, high bioaccumulation potential, and long range environmental transport. Environmental partitioning and fate and transport are not well understood. Therefore, PFAS site investigations in Australia have grown to incorporate measurement of PFAS in all relevant parts of the environment including point-of-use water, groundwater, surface water, pore water, soil, sediment, and a broad range of biota including fish, invertebrates, grasses, game birds, fruit, vegetables, milk, meat and eggs. Typically, PFAS investigations are characterized by investigation areas in the order of tens of square kilometers, technical complexity, and large environmental data sets. This scale and complexity is within a context of evolving science and regulatory frameworks and has led to significant degrees of community outrage.

Approach/Activities. The Australian Department of Defence is undertaking a national program to review its estate and investigate and implement a comprehensive approach to assess and manage the impacts of PFAS on, and in the vicinity of, over 20 of its bases around Australia. The multiple stakeholder groups interacting with these investigations have diverse information needs that don't always align with the purpose for which the data were collected. Information that does align is often very technical. This presentation summarizes the opportunities and challenges relating to data use and stakeholder communications across a national investigation program.

Results/Lessons Learned. This presentation will profile the challenges and successes of stakeholder communications across a technically complex national investigation program of PFAS in Australia. Case studies will profile the need for ongoing sense-making based on the large investigation dataset and overcoming problems encountered when data needs conflict between different stakeholders.