



Evaluating PCOC From Wildfires Using Case Studies

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The frequency and magnitude for wildfire and other structure fire events has been increasing as a direct result of climate change. The cleanup required to rebuild following a fire event often necessitates the evaluation of affected soils, ash, and other debris in order to evaluate the residual risks to human health and the environment, as well as to characterize materials that are to be taken off-Site for disposal.

As fire is known to generate several toxic chemicals from incomplete combustion, to properly characterize these potentially impacted materials, it is first necessary to determine which potential contaminants of concern (PCOCs) may be associated with a fire event. This evaluation process is critical, as the exclusion of PCOCs could result in the misclassification of soils, while the inclusion of too many PCOCs may be cost prohibitive, especially for expensive analysis such as Dioxins and Furans.

This presentation will examine the soil and surface ash analytical results from several postfire investigations conducted following various wildfire and large fire events in order to provide insight into the likely presence of individual compounds as a direct result of a fire event.

Tadd Berger

Mr. Berger is a Director and Practice Leader with Pinchin Ltd. He has approximately 25 years of environmental experience with site investigation and remediation projects. He has managed numerous subsurface investigations and remediations in multiple geologic environments throughout North America. Mr. Berger's experience ranges from small commercial outlets to major chemical and refinery complexes to mine sites. These include numerous chlorinated and mixed contaminant sites, several of which have received regulatory closure under Mr. Berger's guidance. He has been responsible for a variety of projects in which soil, groundwater, surface water, soil vapour and sediment quality in relation to regulatory standards and risk-based evaluations were investigated and remediated. This includes conducting baseline risk assessments, corrective measures studies, remedial feasibility studies, and corrective measures implementation planning. Mr. Berger is a Director and Practice Leader with Pinchin Ltd. He has approximately 25 years of environmental experience with site investigation and remediation projects. He has managed numerous subsurface investigations and remediations in multiple geologic environments throughout North America. Mr. Berger's experience ranges from small commercial outlets to major chemical and refinery complexes to mine sites. These include numerous chlorinated and mixed contaminant sites, several of which have received regulatory closure under Mr. Berger's guidance. He has been responsible for a variety of projects in which soil, groundwater, surface water, soil vapour and sediment quality in relation to regulatory standards and risk-based evaluations were investigated and remediated. This includes conducting baseline risk assessments, corrective measures studies, remedial feasibility studies, and corrective measures implementation planning.