

## **Identification, Management and Proper Disposal of PCB-Containing Electrical Equipment Used in Mines**

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This paper is written for a domestic and international audience and describes environmental hazards, how to identify PCBs, hidden sources to look for, potential liabilities, and what to do if you find PCBs. All references to regulations in this paper are to the United States PCB regulations at 40 CFR Part 761 which should be consulted for more complete information. PCB-containing electrical equipment in surface and underground mines has been documented during U.S. Environmental Protection Agency (EPA) Region 8, mine inspections. PCB-containing electrical equipment is likely to be in mines worldwide because electrical systems in mines follow the same general patterns as any other industry.

This equipment has been often abandoned underground because it was not cost effective to remove it. PCBs are highly stable toxic organic compounds that persist in the environment and can remain a threat for decades. This can contribute to local and worldwide PCB contamination of the ocean, which is considered to be the final sink for PCBs<sup>1</sup>, through ground water circulation and result in problems for which there may be no reasonable solution. PCBs are among the twelve chemicals designated as persistent organic pollutants (POPs) that are targeted by the UN Stockholm Convention with 152 signatories, including the United States of America, to eliminate production, use, and/or release. They are one of several truly global environmental pollutants that bioconcentrate in phytoplankton which is the basis of the ocean food chain and produce about 50% of the atmospheric oxygen.