

Rebecca Altman. "The Trials and Triumphs of the Benzene Tree: The organic compounds that enabled industrialization have unintended, long-last consequences for the planet's life." *The Atlantic*. October 4, 2017.

Dedication

To Vi Waghiyi, Shawna Larson, Pam Miller, Alaska Community Actions on Toxics, and through them, Annie Alowa — all of whom first taught me about PCBs and their far-reaching significance, especially for the two communities of Sivuqaq | Saint Lawrence Island, Alaska. Their leadership, research, and insights into PCBs first put me on the path towards tracing their history and legacy.

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On **connection and significance of H.H. Robertson Company, Robertson Protect Metals (and later Galbestos)**, see Griffith and Carolyn Green Satterfield. *The Triumphs and Troubles of Theodore Swann*. (Black Belt Press, 1999), which notes H.H. Robertson issued a call for technical assistance via Pittsburg's Mellon Institute of Industrial Research fellowship program in the mid- to late-1920s. They desired a coating material to use instead of PCNs, polychlorinated naphthalene (PCNs). According to fellowship records in The Mellon Institute Archives (housed at Carnegie Mellon University), one of Swann's employees, Russell Lewis Jenkins, listed on the chlorinated diphenyl/PCB patents, had been a Mellon Institute Fellow prior to coming to work for Swann, which may explain (in part) the network through which Robertson expressed its technical need, and Jenkins responded. In late

September 1929, Jenkins filed both a publication and patents to cover the material and the process used to make chlorinated diphenyls (now called PCBs). A week earlier, H. H. Robertson & Company filed their patent, which covered a roofing material treated with what they called a new material a “chlorinated di- or polyphenyl” as a better fire resistant treatment than chlorinated naphthalene.” This is significant in that often the ties between Swann and the electric companies are highlighted as the first use. This suggests the connection to Robertson and building materials was at least as significant in the genesis story of industry PCBs and an early customer. See: Patent assigned to H.H. Robertson Company. Filed September 20, 1929, Protected Metal Article. US Patent 1812732. “A protected metal article comprising a metal article provided with a protective layer of fire-resisting asphalt composed of asphalt and chlorinated poly-phenyl.” (Compare with dates of Swann PCB’s filings: Russell L. Jenkins. Assigned to Swann Research, Inc. Process for the production of chlorinated diaryls. Filed September 28, 1929. US1892397A; Charles B. Durgin and Russell L. Jenkins. Assigned to Swann Research, Inc. “Diaryl Containing Wax-Like Solid.” US Patent: 1894266. Filed September 27, 1929.)

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We know from the review article published in *Environmental Science and Pollution Research* by Mitchell Erikson and Robert Kaley (2011, vol 18 (2): 135-151), that: “Aroclor 1258 was used in various building materials as a fire retardant, including roofing and siding material know as Galbestos.... [And that] ‘ this construction material manufactured from the 1950s to the 1970s by HH Robertson Company.” RPM or Robertson Protected Metal was a precursor to Galbestos, and per company patents may have been treated with PCBs or the like perhaps as early as 1930.

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