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PCB MONITORING AND ASSESSMENT IN NEW MEXICO

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ABSTRACT: Poly-chlorinated biphenyls (PCBs) belong to a group of man-made organic chemicals known as chlorinated hydrocarbons. PCBs are a surface water quality concern because they are persistent, and have carcinogenic and non-carcinogenic health effects. In surface waters, bioaccumulation of PCBs up the aquatic food chain and eventually to humans, through fish consumption, is also a major concern. Finding the origin of PCB contamination can be challenging because they can be carried long distances through water or sediment transport, as well as via atmospheric deposition. The state of New Mexico has currently has four water quality criteria for PCBs noted in 20.6.4.900 NMAC for different designated uses, including for Domestic Water Supply (0.50 g/L), Wildlife Habitat or chronic Aquatic Life (0.014 g/L), acute Aquatic Life (2 g/L), as well as a "human health - organisms only" criterion applicable to all waters of the state with a designated, existing, or attainable cold or warm water aquatic life use (0.00064 g/L). Because PCBs are known to be a persistent toxic pollutant, New Mexico's human health criterion applies to all tributaries of these waters per Subsection G of 20.6.4.11 NMAC. There are currently twenty-two stream segments recognized as impaired due to the presence of PCBs in New Mexico's CWA 303(d)/305(b) Integrated Report and List. All but one of these listings are located on the Pajarito Plateau where the NMED completed a special stormwater study in 2005 - 2007. The remaining listing is for the Santa Fe River through the city of Santa Fe. In addition, if the presence of PCBs in fish tissue from a particular water body is high enough to warrant a fish consumption advisory, the water body is also noted as impaired for PCBs in fish tissue. Such advisories and subsequent listings are currently in place for four reservoirs and specific reaches of the Pecos River and Rio Grande, including the reach through the city of Albuquerque. Total Maximum Daily Load (TMDL) planning documents are drafted following impairment listings.

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