Background Information:

- Semi volatile organic compounds (SVOCs) were detected in sediment samples collected from Lily Lake as part of the Indiana Department of Environmental Management’s (IDEM) investigation into the Clear Lake PCB Site. Polychlorinated biphenyls (PCBs) were not detected in Lily Lake.
- SVOCs consist of a class of compounds with low volatility, meaning they do not vaporize as readily as volatile organic compounds (VOCs). SVOCs present in Lily Lake are a subset of compounds known as polycyclic aromatic hydrocarbons (PAHs).
- PAHs are chemicals formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco and grilled or charred food. Common sources of PAHs include vehicle exhaust, asphalt roads or parking lots, and roof shingles.
- PAHs do not dissolve easily in water. Instead, they stick to solid particles like soil and sediment. The soil can then be carried by stormwater runoff and can settle on the bottoms of lakes or rivers.
- Concentrations of PAHs found in Lily Lake do not exceed IDEM’s most conservative recreational soil direct contact screening levels. The recreational screening levels assume people come in direct contact with the contaminated sediment in the lake.

Environmental and Health Impacts:

- People are typically exposed to PAHs by breathing air contaminated with motor vehicle exhaust, cigarette smoke, wood smoke, or fumes from asphalt roads, by eating grilled or charred foods, or by direct contact with contaminated soil or sediment. Direct contact with sediment is the applicable scenario at Lily Lake.
- The human body breaks down PAHs into metabolites that leave the body as excreta.
- Some PAHs have caused cancer in laboratory animals when they are exposed to these compounds over an extended period of time.
- PAHs can break down by reacting with sunlight or other compounds in the air over the period of days or weeks. Microorganisms can also break down PAHs over short periods of time.
- While special tests are available to detect PAHs in the body’s tissues or blood, these tests cannot tell you if potential health effects will occur, what those health effects may be, or where you were exposed to these compounds, since they are present in most people’s daily environment.

Next Steps

- In the summer of 2022, IDEM staff will collect additional samples from Lily Lake and the surrounding area to determine the extent of SVOC contamination.

Additional Information:

- The public may direct questions regarding IDEM’s investigation at the Clear Lake PCB Site, including information on sampling results to date and potential environmental impacts to IDEM Project Manager Justin Hodgson at 317-232-3220; toll-free at 800-451-6027; or by email at jhodgson@idem.IN.gov.
- Questions and concerns about health-related impacts should be directed to the Agency for Toxic Substances and Disease Registry (ATSDR) at 312-866-1462 or the La Porte County Health Department at 219-326-6808 ext. 2200.
- For more information on PAHs, see the ASTDR ToxFAQs™ on PAHs and the Center for Disease Control and Prevention (CDC) PAH Fact Sheet.
- The news media may contact IDEM’s media office at 317-232-8596; toll free at 800-451-6027; or by email at media@idem.IN.gov.