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## **Background**

Polychlorinated biphenyls (PCBs) were utilized in many industrial and commercial applications due to their non-flammability, chemical stability and electrical insulating properties. Although manufacturing of PCBs was banned in 1979, the U.S. Environmental Protection Agency (EPA) authorized the continued use of PCBs in certain enclosed applications. PCBs may still be present in older electrical equipment, such as transformers and capacitors.

In 1982, EPA determined that the use of PCBs in electrical equipment as authorized under its regulations does not present an unreasonable risk of injury to human health or the environment. EPA has not provided any evidence that the toxicity of PCBs is greater than was thought at the time of the original use authorization. However, EPA is expected to issue a notice of proposed rulemaking to reassess whether certain PCB use authorizations should be ended or phased out. This reassessment, related to liquid PCBs, will focus on large capacitors, transformers and other electrical equipment. A revised rule may amend the use authorizations for electrical equipment so that, by a yet-to-be-determined date-certain, "known" PCB and, potentially, PCB-contaminated transformers can no longer be used. EPA is also considering a phase-out date for other types of PCB electrical equipment.

## **How it affects Great River Energy**

PCBs can be found in some equipment on the Great River Energy system, such as transformers, capacitors and circuit breakers. Great River Energy has been actively planning for an eventual PCB phase-out, however the full extent to which PCBs are present in equipment is not entirely known.

All PCB-containing equipment has been removed from Great River Energy's high-voltage, direct-current system. All testable equipment containing PCBs has been removed from Great River Energy's substations. PCB concentrations in some equipment cannot be identified without the use of destructive testing. In many cases, the process required to identify whether PCBs are present would necessitate widespread service disruptions, create possible North American Electric Reliability Corporation violations, damage or destroy equipment and present a real and immediate risk to worker safety and the environment. The only known pieces of PCB equipment within Great River Energy's system are 103 transformers associated with electrostatic precipitators at Coal Creek Station. These PCB transformers are closely monitored, continue to work as designed and will be replaced in the event of a failure or as a result of a change in the PCB use authorization.

Great River Energy continues to monitor the scope and status of PCB rule development.