

Plainwell PCB Cleanup Project Review

A \$30 million cleanup project to remove PCB-contaminated sediment (mud) from the Kalamazoo River's Plainwell Impoundment was completed in December 2008. The 2-year project removed 120,000 cubic yards of sediment containing 4,400 pounds of PCBs. The cleanup work was performed by contractors hired by responsible parties Millennium Holdings LLC and Georgia-Pacific LLC.

Polychlorinated biphenyls, better known as PCBs are chemical compounds with common industrial uses. At high concentrations and exposures they can cause illness in humans and wildlife.

In 2007, over 37,000 cubic yards or 1,059 truckloads of PCB-contaminated sediment were removed from the river and nearby banks. Cleanup crews have completed work in the Phase I coffer dam area with construction of the western water division structure (Phase I coffer dam), which maintains the current flow of the river over the eastern spillway area. This allowed workers to dredge behind the dam, build a water control structure, and remove the portion of the dam in the former powerhouse area.

In 2008, workers removed sediment and restored banks along some 3,000 feet of riverbank. Work has been completed on mid-channel areas, removal of the Phase I cofferdam, and construction of the Phase 2 cofferdam system just upstream of the eastern portion (spillway) of the dam. As of August 11, 2008 some 45,000 cubic yards of 1,289 truckloads of PCB-contaminated sediment have been removed this year. The water control structure, which was constructed during Phase I, will remain in place in the western channel as a means of managing the water level in the impoundment to facilitate the dredging operations. After the mid-channel and near-shore sediment cleanup activities are complete, the water control structure will be removed allowing the Kalamazoo River to flow freely through the new western channel, past what was once the Plainwell Dam.

Kalamazoo River sediment dug up in the Plainwell Impoundment cleanup in 2008 was sent off site to commercial landfills for disposal. The Plainwell waste is being divided into sediment containing 50 parts per million or more of PCBs and material, with lower concentrations. To help put this in perspective that equates to 50 drops of dye in 10,000 gallons of water.

Under the federal Toxic Substances and Control Act, the U.S. Environmental Protection Agency regulates the use, storage and disposal of sediment with PCB concentrations exceeding 50 ppm. Sediment with PCBs above the 50 ppm level was sent off site to Environmental Quality Co.'s Wayne Disposal Landfill in Belleville, Michigan. Sediment with less than 50 ppm PCBs, which is considered nonhazardous waste, was sent to Allied Waste's C and C Landfill near Marshall, Michigan and its Ottawa Farms Landfill near Coopersville, Michigan.

EPA Region 5 and state partner Michigan Department of Environmental Quality oversaw the dredging. The estimated cost of the time-critical removal cleanup was \$30 million and was complete in December 2008.