Anaerobic Biochemical Reactor (BCR) Treatment of Mining-Influenced Water (MIW)—Evaluating Reduction in Concentrations of Metals and Aquatic Toxicity

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- A BCR is a type of passive treatment technology that is applicable for treating MIW under varied water quality and site-specific conditions
- BCR treatment is effective in removing significant amounts (often > 95%) of many metals from MIW, but sometimes the treated water may be acutely toxic to aquatic organisms without additional post-BCR treatment steps to remove toxicants created by the microbial processes occurring during treatment
- Combining chemical and biological monitoring can lead to better treatment system designs to achieve the goal of minimizing environmental and human health impacts