

Emergency Response and Corrective Action for South Carolina Dams

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The South Carolina Department of Health and Environmental Control (SCDHEC) oversees compliance for state-regulated dams through the Dams and Reservoirs Safety Program. Over the years, some dams have suffered from owner neglect or the damage from natural disasters and have become dangerous to public safety. The dam safety group has been involved in a number of dams requiring emergency response or corrective action from the agency to make these dams safe.

CDM Smith became involved in the fall of 2016 after being awarded a program support contract to assist SCDHEC with program-related needs. Over the last three years, CDM Smith has assisted SCDHEC with consultation at each of these incidents in evaluation of risks, assessment of damages, and problem resolution. In some cases, situations may arise which require immediate or time-sensitive action.

Seepage, piping through embankments, cracking or damaged spillways, and road closures were all factors in the actions. Emergency repairs and protective measures include coordination of roadway closures, installation of temporary siphons for drawdown, regular monitoring of reservoir level, diagnostic investigations, and complete removal of the hazard by decommissioning dams.

This presentation will touch on the circumstances of specific dam-related incidents and actions taken to address and resolve dam-safety problems. SCDHEC and CDM Smith continue to act quickly in response to each incident and have shown resilience and adaptability in each of the dam incidents. Some dams that have necessitated action are: Lake Oakdale Dam (D1627), Mandel Park Dam (D0584), Wesley North Dam (D4885), Springwood Lake Dam (D0558), Adams Pond Dam (D0577), and Fiddlers Cove Dam (D4186).