INTERSTATE TECHNOLOGICAL REGULATORY COUNCIL (ITRC) CONSTRUCTED TREATMENT WETLANDS GUIDANCE DOCUMENT[1]

Paul Eger[2]

Abstract. The Interstate Technological Regulatory Council (ITRC) was formed in 1995. Although the ITRC is a state led organization (41 member states), it also includes personnel from the District of Columbia; three federal agencies; and tribal, public, and industry stakeholders. The primary objective is to provide assistance to state regulatory personnel so they can better understand innovative technologies and permit them more quickly, thereby providing less expensive alternatives to standard treatment techniques. Assistance is provided in the form of technical documents and classroom and internet training.

ITRC produces technical and regulatory documents through the use of technical teams, comprised of state agency staff from at least 5 states, and members from universities, industry, federal agencies and public stakeholders. In 2001, a team was formed to examine the use of constructed wetlands to treat a wide variety of wastewater, including: stormwater, municipal and onsite wastewater, mine drainage, agricultural runoff, industrial discharges, landfill leachate, and water from site remediation activities. Although constructed wetlands have been commonly used in some applications, their use in remediation projects is relatively new.

The guidance document was completed in late 2003, and internet training will begin in 2004. The document includes a general description of removal mechanisms, the types of wetland treatment systems, the use of wetlands for each type of wastewater with typical input concentrations and removal efficiencies, design, construction and cost information, regulatory considerations, case studies and a decision tree for each application. The decision trees should help both regulators and applicants work through the process of successfully developing and permitting a wetland for a given application.

The team is currently working on a guidance document on mitigation wetlands; wetlands constructed to replace those impacted by human activity.

---

1 Paper was presented at the 2004 National Meeting of the American Society of Mining and Reclamation and The 25th West Virginia Surface Mine Drainage Task Force, April 18-24, 2004. Published by ASMR, 3134 Montavesta Rd., Lexington, KY 40502.

2 Paul Eger is Principal Engineer, Minnesota Department of Natural Resources, Division of Lands and Minerals, St. Paul, MN 55155