U.S. Environmental Protection Agency (EPA) - Environmental Technology Verification (ETV) Program



September 2008 Water Quality Protection Center

An Environmental Technology Verification (ETV) Organization



What is ETV?

The U.S. Environmental Protection Agency (EPA) established the Environmental Technology Verification (ETV) Program in 1995 to verify the performance of innovative technical solutions to problems that threaten human health or the environment. ETV's mission is to accelerate the use of new environmental technologies in the domestic and international marketplaces. ETV provides third-party, quality-assured performance data so buyers and users of environmental technologies can make informed decisions about the purchase and application of these technologies. Various groups are actively involved in ETV, including stakeholders, technology buyers and users, vendors, permitters, technology experts, consulting engineers, and investment companies. All test protocols, test plans, verification reports, and verification statements are available on the ETV Web Site at www.epa.gov/etv.



What Does the Center Do?

The U.S. Environmental Protection Agency's partner in the ETV Water Quality Protection (WQP) Center is NSF International, a not-for-profit, nongovernmental organization providing public health and safety-based risk management solutions and protection of the environment. The goal of the WQP Center is to verify commercial-ready environmental technologies that protect ground and surface waters from contamination. New and innovative environmental technologies provided by participating vendors are evaluated by a third party organization, following technically sound test procedures, appropriate Quality Assurance/ Quality Control, and a managed process, to provide purchasers, specifiers and permitters with credible and relevant data. Verification protocols are developed for specific technology areas following an open process with broad-based stakeholder input. The protocols then serve as templates for developing test plans for the evaluation of individual technologies at specific locations. Verification reports detailing the results of the technology evaluations are made publicly available to assist in marketing, purchase and permitting of the technologies. Verification statements, executive summaries of each verification test, are also provided. Technologies addressed by the WQP Center include:

- Watershed Protection Technologies
- Wet Weather Flow Technologies
- Urban Infrastructure Technologies
- Decentralized Wastewater Treatment Technologies



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- Decentralized Wastewater Treatment Technologies
- » Wastewater treatment technologies
- » Nutrient reduction technologies
- Watershed Protection Technologies
- » Ship ballast water treatment technologies for aquatic invasive species
- » In-drain treatment technologies
- » Mercury amalgam removal technologies
- » Animal waste treatment technologies
- » UV disinfection technologies for secondary effluent and reuse applications
- Urban Infrastructure Technologies
- » Rehabilitation technologies for water conveyance and wastewater collection systems
- » Condition assessment technologies
- Wet Weather Flow Technologies
- » Stormwater treatment devices
- » High-rate disinfection (induction mixers and UV disinfection)
- » High-rate solids separation
- » Flowmeters



Zebra mussels are one example of aquatic invasive species for which ballast water treatment technologies will be evaluated.



The Triton TS-5000 Separator is one of three solids separation technologies evaluated by the Water Quality Protection Center for the treatment of flushed swine waste.

Information on the WQP Center, such as testing activities, verification reports and statements, and meeting announcements may be found on the EPA ETV Web Site (<u>www.epa.gov/etv</u>) and the NSF Web Site (<u>www.nsf.org/etv</u>).

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