



## 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 marketplace. ETV provides third-party, quality-assured performance data so buyers and users of environmental technologies can make informed purchase and application decisions. ETV operates through public/private testing partnerships (called centers) to evaluate the performance of environmental technologies for monitoring, pollution control, and pollution prevention.

Various groups are actively involved in ETV, including stakeholders, technology buyers and users, vendors, permittees, technology experts, consulting engineers, and investment companies. All test protocols, test plans, and verification reports and statements are on the ETV Web Site at <http://www.epa.gov/etv>.

## December 2008

### Materials Management and Remediation Center

The Materials Management and Remediation (MMR) Center is a new ETV center in 2008. The MMR Center will verify materials management technologies, including recycling, beneficial use of waste materials, recovery of useful components of wastes, and treatments to minimize disposal requirements (e.g., containment, volume, cost). The center will also verify technologies to remediate contaminated land and ground water, such as is found at Superfund sites and other properties where industrial or commercial activities resulted in a legacy of hazardous constituents that limits future use of the property. Potential verification areas may include:

- Technology types in active development and technology segments in stable or growth phase
- Materials stream volume, risks, and suitability for secondary use
- Waste and/or site types for which cost-effective options are lacking
- Known client needs where verification would help in decision-making
- Absence of existing certification/verification/demonstration opportunities

The MMR Verification Center is operated in cooperation with Battelle, and will conduct verification testing at its facilities and/or conduct or oversee testing performed at field sites. Vendors interested in learning more about the verification process should complete a MMR Center Vendor Application (<http://www.epa.gov/nrmrl/std/etv/howtoapply.html>).

## Useful Marketing Tool

Vendors have realized the value of having independent verification data for use in marketing their technologies. In a survey of vendors who participated in ETV verification tests, nearly all reported that ETV's verification statements were useful in marketing and that they would consider submitting another technology for verification.

Other vendors said the process was valuable because of the credibility of independent testing under EPA oversight, the assurance of verification statements and reports given to potential customers, and the marketing visibility of the ETV logo.



## Potential Benefits of ETV

<b>For technology developers and vendors:</b>	Increased credibility due to independent, third-party testing, providing high-quality, consistent, and widely accepted data
	Access to expertise in developing, verifying, and applying materials management and remediation technologies
	Reduced technology verifications required for the technology's acceptance by multiple states and localities
	Enhanced acceptance of environmental technologies by regulators and permittees
	A sound, science-based marketing tool
	Increased public awareness due to ETV's outreach efforts, e.g., publications, Web site, conferences
	Increased markets and business opportunities
<b>For technology users and purchasers:</b>	Added confidence for investors, stockholders, and lenders
	Aid in evaluating a variety of materials management and remediation technologies
	Access to credible performance data
<b>For regulators and permittees:</b>	Assurance that the technology's performance is independently verified
	Increased availability of technologies that meet users' needs
	Confidence that the technology's performance has been verified by an independent third party
	Validation by colleagues who are ETV stakeholder committee members
	Test data addressing realistic requirements but not limited to any single state's regulations
	Technological basis for streamlining the regulatory process and/or simplifying and revising regulations
<b>For everyone:</b>	Increased ability to make informed decisions
	More rapid deployment of technologies to meet an agency's requirements
	Cost-effective and efficient solutions to environmental challenges
	Growth of the environmental technology sector.

## How the MMR Center Works

Vendors interested in obtaining objective third-party performance data on their product, and a competitive advantage in the marketplace can submit their technology for verification. Battelle staff will evaluate the vendor applications that are submitted. Additional information about the technology may be requested from the vendor to complete this evaluation. Members of the ETV MMR Center's stakeholder committees—including representatives from regulatory agencies, industry, trade associations, and environmental groups—will assist Battelle in prioritizing the technologies submitted. Battelle notifies vendors when a verification test of their technology is being considered and invites additional vendors to participate.

Once a technology or group of technologies has been identified for verification testing, Battelle will draft a vendor agreement to be signed by the participating vendors, Battelle will then develop a draft test/quality assurance plan (TQAP). Participating vendors and representative stakeholders will provide advice and suggestions in developing the plan. The draft plan will be reviewed by the participating vendor(s), stakeholder committee members, U.S. EPA representatives, and additional peer reviewers as necessary. Then the plan is revised by Battelle and sent to participating vendors, EPA ETV MMR Center Project Officer, and EPA ETV MMR Center Quality Manager for approval. The verification test will be conducted according to the approved TQAP. Individual verification reports and verification statements will be prepared for each participating technology.

## Contact the MMR Center

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