

US EPA ARCHIVE DOCUMENT



Environmental Technology Verification Program - P2, Recycling, and Waste Treatment Pilots



The U.S. Environmental Protection Agency (EPA) has instituted the Environmental Technology Verification Program (ETV) to verify the performance of innovative technologies for problems that may affect human health or the environment. ETV was created to accelerate the entrance of new environmental technologies into the domestic and international marketplace. It will supply technology buyers and suppliers, consulting engineers, states, and EPA regions with high-quality data on the performance of new technologies.

ETV Verification Process and Benefits to Vendors and Purchasers

The verification process involves:

- Identifying critical areas requiring pollution prevention (P2), recycling, or waste treatment solutions
- Identifying innovative technologies that address the critical areas
- Soliciting commercial-ready technologies for verification testing
- Conduction verification testing of those technologies in industry, under actual operating conditions, as appropriate
- Disseminating the verification results through an extensive distribution network.

Potential benefits of ETV verification include:

- Increasing credibility due to independent, third-party testing providing high-quality and widely accepted data
- Enhancing deployment of innovative technologies in industry
- Increasing market penetration of less-polluting products
- Accelerating the development and commercialization of technologies
- Providing objective performance data to buyers of environmental technologies
- Facilitating technology acceptance and permitting at the state and local levels.

Coatings and Coating Equipment Pilot

Of three pilot programs in pollution prevention technology initiated under ETV, one continues to operate, however, verifying only those technologies already in its queue. The P2 Coatings and Coating Equipment Pilot, operated by Concurrent Technologies Corporation (CTC) with the Department of Defense's National Defense Center for Environmental Excellence (NDCEE), verifies the performance of commercial-ready coatings and coating equipment that have potential to prevent pollution.

Innovative coatings are environmentally friendly by virtue of their composition or their curing process, such as near-zero-VOC liquids, powder coatings, and UV- or EB- curable coatings. Innovative equipment generates less pollution by expanding the use of innovative coatings or by applying coatings more efficiently, such as high transfer efficiency spray equipment and laser targeting devices.

Focus areas include: coating process technologies; high transfer efficiency paint spray guns; high-volume, low-pressure paint spray guns; innovative liquid paints (low VOC and/or HAP); laser-targeted paint application devices (spray painter training devices); powder coating technologies; and UV-curable coatings.

The two other P2-focused ETV pilots have not been extended into the program's current operational period, however, verification reports and statements continue to be posted on the ETV Web Site. These pilots are:

P2 Metal Finishing Technologies Pilot: verified the performance of commercial-ready metal finishing technologies that are designed to improve industry performance and achieve cost-effective pollution prevention results. Example technology categories include: aqueous cleaner solution maintenance; chromate conversion coating solution maintenance; electroless nickel bath maintenance; energy use reduction technologies; mineral acid bath maintenance; sludge reduction technologies; and water use reduction/recycling. This pilot was also operated by *CTC*.

P2, Recycling, and Waste Treatment Systems Pilot: verified the performance of commercial-ready hazardous waste-related technologies (with the exception of remediation and incineration technologies). Example technology categories include: aerosol can puncturers; aqueous circuit board cleaners; arsenic removal systems for water; computerized ion exchange regeneration processes; double containment hose fittings; industrial belt fiber reinforcement bonding with solvents; lithium metatungstate mineral assays; rechargeable alkaline batteries; synchronous scanning luminoscopes; and vegetable oil transformer fluids. This pilot was operated by the California Environmental Protection Agency, Department of Toxic Substances and Control, which will continue to verify technologies under the California Environmental Technology Certification Program.

Contact Information

P2 Coatings and Coating Equipment

Michael Kosusko, EPA
Tel: (919) 541-2734
kosusko.mike@epa.gov

Brian Schweitzer, CTC
Tel: (814) 269-2772
schweitz@ctcgsc.org

P2 Metal Finishing Technologies

George Moore, EPA
Tel: (513) 569-7991
moore.george@epa.gov

Donn Brown, CTC
Tel: (727) 549-7007
browndw@ctcgsc.org

P2, Recycling, and Waste Treatment Systems

Norma Lewis, EPA
Tel: (513) 569-7665
lewis.norma@epa.gov

Invitation to Participate

Pollution prevention technology developers outside the coatings area that wish to have technologies verified under ETV may be considered under the ongoing media-specific centers, such as ETV's Air Pollution Control Technology Center, Greenhouse Gas Technology Center, or Water Quality Protection Center. The technology's primary impact on reducing pollution to air or water, or in energy savings and reduction of greenhouse gases should determine the appropriate ETV center to apply to for verification.

Additional information is also available by accessing ETV Web Site at:

<http://www.epa.gov/etv>