

US EPA ARCHIVE DOCUMENT

Application for Technology Verification

This form provides information about the verification process and describes the information and commitments needed for preparing, conducting, and reporting a verification test of your technology under the EPA/ETV Advanced Monitoring Systems (AMS) Center. Please provide the information requested as fully as possible, attach supporting documentation, and return to Dr. Ann Louise Sumner at the address indicated below.

Ann Louise Sumner
AMS Center Verification Test Coordinator
Battelle
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Columbus, Ohio 43201-2693

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VENDOR _____

TECHNOLOGY _____

A. Verification Process

Verification tests performed by the AMS center follow the following process:

1. **Identifying technologies for verification.** 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 technologies vendors submit for verification. Additional information about the technology may be requested from the vendor to complete this evaluation. Members of the AMS 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.
2. **Path to Verification.** 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, which will also be invoiced for the verification fee deposit. Upon receipt of the signed vendor agreement and fee, Battelle will 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 for approval. The verification test will be conducted according to the approved TQAP. The full verification fee will be due after the completion of the TQAP and before the start of testing.
3. **Requirements for Vendors.** An AMS Center verification test will require the following specific commitments from participating vendors:
 - a. Provide detailed information on your technology, including its operating requirements or limitations, description of previous testing programs, and current use of the technology.

This information will be used solely to plan verification testing. Material to be treated as confidential should be marked as such.

- b. Commit a person from your organization to be Battelle's point of contact, and to lead your participation in the verification test.
 - c. Sign a vendor agreement and pay a fee for verification by the AMS Center. This verification fee will cover the cost of the verification test. However, it is possible that the cost may be supplemented by EPA and/or collaborator funding and in-kind contributions.
 - d. Commit the technology, and an operator if needed, to a test at a field and/or laboratory test site. Suitable sites and the length of the test will be identified based on the requirements of the technologies to be tested, in collaboration with the participating technology vendors.
 - e. Assist in preparing for the verification test, by providing input to the test/quality assurance plan (TQAP) and approving this plan.
 - f. Review the draft verification report and verification statement.
4. **Verification Test Products.** Participating vendors receive a *verification report* stating quantitatively the performance of the technology (based on third-party, quality assured data under realistic test conditions) and a *verification statement* summarizing results, signed jointly by Battelle and EPA senior management. Separate reports and statements are issued for each technology tested and each describes the performance of that technology only. There are no intercomparisons or rankings of the verified technologies. A vendor can distribute the *verification statement* to attract prospective users of the technology and refer interested parties to the statement and report posted on EPA's ETV website (<http://www.epa.gov/etv>).
5. **Test Benefits.** Feedback from vendors who have participated in ETV verification tests confirm the benefits to their companies. Here are examples:
 - a. Obtain objective, credible, EPA quality-assured performance data for potential buyers of your air, water, or soil monitoring technology.
 - b. Verified technologies are widely publicized in ETV web pages, publications, and trade show exhibits.
 - c. Join an expanding "club." As of September 2008, over 400 technologies were ETV-verified, over 125 of which were verified by the AMS Center. More than 65 vendors have had multiple technologies verified by ETV.
 - d. Open new international markets, as ETV can collaborate with ETV programs in other countries.
 - e. Investors can have added confidence in your technology.

B. General Information

1. Please provide the name, complete mailing address, phone, fax, and email address for the following representatives of your organization:

Person authorized to commit the technology for testing (i.e., sign the vendor agreement):

Name _____

Title _____

Address _____

Phone _____ Fax _____

Email _____

Person who will serve as the contact point and lead your participation in the verification test:

Name _____

Title _____

Address _____

Phone _____ Fax _____

Email _____

Person authorized to pay the verification fee:

Name _____

Title _____

Address _____

Phone _____ Fax _____

Email _____

2. Please attach a detailed description of your technology, as an aid in planning the verification test. Provide instrument manuals, operating instructions, technical publications, schematics, drawings, photographs, or any other information you feel is pertinent to understanding the operation of your technology. Material to be treated as confidential should be marked as such.
3. Please attach information on any previous evaluations of your technology. Provide copies of data or evaluation reports, or describe the testing including location, date, testing procedures, QA/quality control activities, testing organization, and contact person.

C. Verification Testing

To make the verification process as effective as possible, we wish to take advantage of the experience of vendors in evaluating their technologies. The following items are intended to draw out any standard procedures, key requirements, or useful suggestions for consideration in planning the verification test. Feel free to provide any other information or materials you think may be helpful in planning the verification test.

1. Identify any standard test procedures or guidelines (e.g., ASTM, EPA, NIST) that you think should govern the testing of your technology.

2. Identify the general type of field environment (e.g., chemical plant, incinerator, industrial wastewater treatment plant, environmental water source) that you think would be most appropriate for use as a verification testing site. You may identify specific sites if you wish, and these will be considered for use in the verification test.

3. Attach information describing the limitations or requirements of your technology in terms of field testing. What are the requirements for field setup, electrical power, other utilities, expendables, space, presence of an operator, maintenance, waste disposal (i.e., quantity and type), and dismantling of the setup? Are there any key characteristics required of a test site for verification testing of your technology (e.g., location, size, or physical layout of facility, nature of emission sources, species emitted)? What training is required for those operating the technology?

4. Describe the sampling and QA/QC requirements of your technology (e.g., requirements for sampling duration or frequency, sample preparation or flow rate, calibration or zeroing of the technology, etc.).

5. Typically, technologies will be tested for verification of their accuracy, precision, detection limits, linearity, and data completeness, and for evaluation of operational factors such as maintenance needed and ease of use. Are there other key performance criteria specific to your technology that would be important to evaluate?

6. What parameters of your technology must be monitored during testing to ensure the technology is functioning properly?

D. Testing Collaborators

Typically, the cost of an ETV verification test is shared by the vendor and other collaborators. To the extent that collaborators can provide in-kind or funding contributions to an ETV verification test, the verification fee for vendors can be reduced. Please identify any organizations that might be interested in contributing to a verification test of your company's technology.

Potential Collaborator _____

Point of Contact _____

Address _____

Phone _____ Fax _____

Email _____

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Point of Contact _____

Address _____

Phone _____ Fax _____

Email _____