UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

SEP 26 2007

MEMORANDUM

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

SUBJECT: Use of New ASTM Performance Verifications for Baghouse Media

FROM: Stephen D. Page, Director
Office of Air Quality Planning and Standards

TO: Regional Air Division Directors

The Office of Air Quality Planning and Standards (OAQPS) is the delegated Agency authority for approving more advanced alternatives to emission test methods specified in 40 CFR Parts 50, 61, and 63 for stationary sources. As part of this responsibility, we actively encourage the development, verification, and application of new approaches that provide better emissions monitoring and control information from regulated sources in more continuous, more objective, more accurate, or more inexpensive formats. This approach has been strongly encouraged and recommended in reports by both the National Academy of Science and the Government Accountability Office.

Over the past ten years, OAQPS has collaborated closely with EPA's Office of Research and Development in the Environmental Technology Verification Program (ETV) to verify the performance of air pollution monitoring and control technologies. One recent ETV project provided bag-house media vendors with objective third-party verifications of the performance of their products. Their bag-house media were verified for penetration of PM2.5 total particulate matter, and operating pressure drop. The test procedures were developed with a diverse group of stakeholders and incorporated into the *"Generic Verification Protocol for Baghouse Filtration Products"* located at http://www.epa.gov/etv/pdfs/vp/O5_vp_bfp.pdf. Completed verifications of bag-house media can be found at http://www.epa.gov/etv/verifications/verification-index.html.

The ETV protocol was used as the basis for ASTM Standard D6830-02. Characterizing the Pressure Drop and Filtration Performance of Cleanable Filter Media." Also, the International Standards Organization (ISO) has proposed a similar version which is currently moving through the ISO approval process.

The South Coast Air Quality Management District (SCAQMD) has followed the ETV and ASTM verification programs and adopted Rule 1156: PM Reductions for Cement Industries on Noveinber 4,2005. This Rule strongly encourages the use of "verified bag-house fabrics" to

control particulate einissions from cement manufacturing facilities. Paragraph (e) (7) of the rule reduces the frequency of compliance testing from one year to five for those facilities having "verified bag-house fabrics." Discussions with SCAQMD personnel indicate this approach is successful in encouraging the use of quality bag filter media. Anticipating more interest in these verifications by regulators, bag-house manufacturers and vendors are undertaking increased testing of their bag-house fabrics using the ETVIASTM protocol.

We believe that use of this protocol encourages use of high performance bag-house filter materials and encourages better quality construction. When combined with good Compliance Assurance Monitoring (CAM) procedures, there will be more confidence in the overall environmental performance of bag-house installations.

Where appropriate, we plan to consider the ETVIASTM protocol in future federal regulations. I encourage you in the Regional Offices to consider opportunities to employ these protocols in State and local agency regulatory programs and to suggest that their bag-house installations use filter media tested using the ETVIASTM protocol as documented in ASTM Standard D6830. I would appreciate your help in facilitating the use of this verification approach in your State, Local, and Tribal programs.

Tom Logan (919-541-2580) or John Bosch (919- 541-5583) can provide further detail on this subject if you have questions.

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