

New Electronic Audit Capability: A Significant Development in Data Quality Verification

The Clean Air Markets Division is working with Acid Rain Program sources to further improve the quality of the emissions data reported for compliance with program requirements. Since the Program's inception in 1995, the emissions data – continuously reported by sources, verified and recorded by EPA, and posted for public consumption on the Internet – has been among the most complete and accurate data ever collected by the Agency. Although the emissions data has always been subject to numerous quality assurance tests and periodic audits, the sophistication of the auditing tools increased tremendously in recent years. The Agency and affected sources are now working together to implement the newest auditing capabilities. New capabilities include software that performs hourly checks to catch errors, miscalculations and/or oversights in monitoring and reporting systems and thereby help ensure the completeness, quality and integrity of the emissions data.

Why is EPA Instituting a New Electronic Audit Procedure?

EPA has always audited emissions data reports to ensure the greatest possible level of accuracy of data for compliance determination. As technological capabilities have improved since the start of the Acid Rain Program, so has the sophistication of audit mechanisms. This is partially in response to the need for improved tools to cover more diverse types of emissions monitoring configurations as the universe of affected sources has grown to more than 2,300. The latest development, hourly checking software, provides unprecedented review capability for sources and regulators. This new software has been made available to all affected sources. EPA is currently in the process of assisting sources in implementing this new program and ensuring that it is being utilized widely and appropriately.

When Will Results of the New Audits be Available?

At this early stage of implementation, EPA has not developed a system for tracking changes to emissions reported in interim submissions. Beginning in 2003, however, as the new program is firmly established in every quarter for all significant sources of emissions, EPA will provide public postings on the Internet of summary results.

What Does EPA Expect to Result From This Improved Audit Capability?

In the short run, initial results indicate that the electronic audit will highlight a greater number of potential “red flags” that require additional verification. At least temporarily, implementation of the new procedures may create the impression of a decrease in overall monitoring performance. Based on past experience, however, EPA is confident that issues resulting from the improved audit procedures will not have a significant impact on compliance with the national emissions cap. Nevertheless, some units may need to surrender additional allowances for periods when monitors were not providing fully validated data. These conservative “missing data” procedures help ensure that emissions are never understated and are one of the strong incentives for the extremely high monitor availability seen in the Acid Rain Program. The end result will be an increasingly improved body of information about air emissions of sulfur dioxide, nitrogen oxides and carbon dioxide from the electric power sector.

Who Can I Contact With Questions?

For additional information on the new electronic audits, contact Theresa Alexander of the Emissions Monitoring Branch at alexander.theresa@epamail.epa.gov .