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**California's PM2.5 Performance Audit Programs**

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The California Air Resources Board's (CARB) Quality Assurance Section is responsible for ensuring the quality and validity of the PM2.5 ambient air monitoring data generated in California. The QAS has implemented a comprehensive audit program that includes both laboratory and field operations. By focusing our efforts on both aspects of the PM2.5 program, we ensure the highest data quality possible.

In 1998, the QAS initiated a laboratory pre-certification program. Laboratory pre-certification addressed those requirements that must be followed by a laboratory conducting PM2.5 mass analysis determinations. Pre-certification included an on-site performance audit of the weighing facilities. The audit evaluated the accuracy of the balance and temperature and relative humidity sensors, and the completeness of the quality control records. All laboratories have successfully met the audit requirements.

In 1999, the CARB's QAS began conducting field performance audits of the PM2.5 samplers. The performance audits entail a check of the sampler's flow rate and temperature and barometric pressure sensors. The audit results indicate few instances of operational problems. Of the 96 audits conducted, 8 were found to be in exceedance of the U.S. EPA's control limits. Calibration problems were typically the cause of the exceedances. The QAS has also developed a mail-out audit system that is similar to the U.S. EPA's National Performance Audit Program. The audit system includes equipment capable of measuring flow rate, temperature, and pressure and was designed for use by the station operators. The QAS plans to use the mail-out system to support the field performance audit program by June 2000.