Notice of EPA Re-designation of Certain Equivalent Methods for PM_{2.5}

December 18, 2006

To: This notice may be of interest to users of any of the 7 PM_{2.5} air monitoring samplers listed below that have been designated by the U.S. EPA as equivalent methods under 40 CFR Part 53, and users of the air monitoring measurements obtained with these methods.

Date: The re-designations are effective as of December 18, 2006.

Equivalent Methods Affected:

| Designation No. | Method Sampler Make and Model | FR Notice |
|-----------------|--|-------------|
| EQPM-0202-142 | BGI Models PQ200-VSCC and PQ200A-VSCC | 67 FR 15567 |
| EQPM-0202-143 | R & P Partisol [®] -FRM 2000 PM-2.5 FEM | 67 FR 15567 |
| EQPM-0202-144 | R & P Partisol [®] 2000 PM-2.5 FEM Audit | 67 FR 15567 |
| EQPM-0202-145 | R & P Partisol [®] -Plus 2025 PM-2.5 FEM Sequential | 67 FR 15567 |
| EQPM-0804-153 | Thermo Electron RAAS2.5-100 FEM | 69 FR 47924 |
| EQPM-0804-154 | Thermo Electron RAAS2.5-200 FEM | 69 FR 47924 |
| EQPM-0804-155 | Thermo Electron RAAS2.5-300 FEM Sequential | 69 FR 47924 |

For the full descriptions and further identification of the manufacturers of these methods, consult the **List of Designated Reference and Equivalent Methods** available at <u>www.epa.gov/ttn/amtic/criteria.html</u>. (Note also that the manufacture and sale of some of these sampler models may have been discontinued by their manufacturer.)

Summary:

These 7 currently designated equivalent methods are re-designated by EPA as $PM_{2.5}$ reference methods, based on a change in the $PM_{2.5}$ reference method specifications. Their existing $PM_{2.5}$ equivalent method designations will also continue.

Additional information:

On October 17, 2006, the EPA promulgated amendments to 40 CFR 50, Appendix L (Reference Method for the Determination of Fine Particulate Matter as PM_{2.5} in the Atmosphere) that are effective as of December 18, 2006 (71 FR 61226). One of these amendments is a change in the specification of the particle size separator used in the sampler (Section 7.3.4) to allow an alternative separator other than the originally specified WINS impactor. The alternative separator is a cyclone-type separator specifically identified as "BGI VSCCTM Very Sharp Cut Cyclone particle size separator specified as part of EPA-designated equivalent method EQPM-0202-142 (67 FR 15567, April 2, 2002) and as manufactured by BGI Incorporated, 58 Guinan Street, Waltham, Massachusetts 20451." This change thus permits a PM_{2.5} reference method (FRM) sampler to now be configured with either the original WINS impactor separator or the alternative cyclone separator.

To date, the seven $PM_{2.5}$ methods listed above that use air samplers configured with the BGI VSCCTM separator have been previously designated by EPA as equivalent methods under the provisions of 40 CFR Part 53 (Ambient Air Monitoring Reference and Equivalent Methods). As a result of the change to the $PM_{2.5}$ FRM, the EPA has re-designated these 7 methods as $PM_{2.5}$ reference methods under Part 53, as the EPA indicated it would in the preamble associated with the FRM amendments (71 FR 61214). The 7 methods will retain their previous equivalent method designations as well, and thus the methods will carry dual designations as both reference and equivalent methods, under the following designated method identification numbers:

| Method | Reference method | Equivalent method |
|--|------------------|-------------------|
| BGI Models PQ200-VSCC, PQ200A-VSCC | RFPS-0498-116 | EQPM-0202-142 |
| R & P Partisol [®] -FRM 2000 PM-2.5 FEM | RFPS-0498-117 | EQPM-0202-143 |
| R & P Partisol [®] 2000 PM-2.5 FEM Audit | RFPS-0499-129 | EQPM-0202-144 |
| R & P Partisol [®] -Plus 2025 PM-2.5 FEM Seq. | RFPS-0498-118 | EQPM-0202-145 |
| Thermo Electron RAAS2.5-100 FEM | RFPS-0598-119 | EQPM-0804-153 |
| Thermo Electron RAAS2.5-200 FEM | RFPS-0299-128 | EQPM-0804-154 |
| Thermo Electron RAAS2.5-300 FEM Seq. | RFPS-0598-120 | EQPM-0804-155 |

Note that these reference method identification numbers are those originally assigned to the corresponding $PM_{2.5}$ sampler models configured with the WINS separator.

Since reference methods generally have wider applicability than equivalent methods, newly manufactured samplers of any of the seven models identified above will likely be labeled and sold as reference methods. Owners of any of the re-designated sampler models may elect to "convert" them to FRMs and start using them as such and report monitoring data obtained with them as FRM data. To do so, owners should contact the appropriate sampler manufacturer for a new reference method identification label to affix to the sampler. Alternatively, the samplers may continue to be identified and used as equivalent methods, with monitoring data reported under the equivalent method designation number.

Owners of other $PM_{2.5}$ samplers currently designated as reference methods may reconfigure them with the BGI VSCCTM separator in lieu of the original WINS separator. In this case, the VSCCTM device should be purchased from the sampler manufacturer to insure that the correct version specific for the sampler model is obtained, as there may be slight external physical differences in the device for each sampler model. The sampler manufacturer will also furnish installation, conversion, operation, and maintenance instructions for the VSCCTM device. No change in the sampler's reference method identification label is necessary for the reconfigured sampler.