single "site" record; data for the site record would originate mainly from the designated "primary" monitor at the site location, but would be augmented with collocated Federal reference method (FRM) or Federal equivalent method (FEM) monitor data whenever valid data are not generated by the primary monitor. This procedure will enhance the opportunity for sites to meet data completeness requirements. This language likewise codifies existing practice, since the technique was previously documented in guidance documentation and implemented as EPA standard operating procedure. Commenters agreed that this was a valid approach and should be implemented.

3. $PM_{2.5}$ Computations and Data Handling Conventions

As proposed, EPA is maintaining a spatially-averaged annual mean, with revisions to the criteria for when spatial averaging can be used (see section I above, as well as section II.E.2), as the form of the annual $PM_{2.5}$ standard and is retaining a 98th percentile concentration as the form of the 24-hour $PM_{2.5}$ standard. Although no actual computational change was proposed for a spatially-averaged annual mean, the proposed Appendix N differentiated, in language and formulae, between a spatial average of more than one site and a spatial average of only one site. We are adopting these changes throughout Appendix N as appropriate to alleviate confusion caused by the current "catch-all" generic reference (*i.e.*, "spatial average" or "spatially averaged") found throughout the existing Appendix N.

As proposed, appendix N identifies the NAAQS metrics and explains data capture requirements and comparisons to the standards for the annual $PM_{2.5}$ standard and the 24-hour standard (in sections 4.1, and 4.2, respectively); data rounding conventions (in section 4.3); and formulas for calculating the annual and 24-hour metrics (in sections 4.4 and 4.5, respectively). A significant comment related to the 98th percentile formula and an associated bias for periodic sampling is discussed above in section II.E.1.

With regard to the annual $PM_{2.5}$ standard, EPA proposed to retain current data capture requirements with two exceptions. The current appendix N had reduced data capture requirements for years that exceeded the level of the annual NAAQS; specifically, a minimum of 11 valid samples per quarter as opposed to a more stringent 75 percent (of scheduled samples) was considered sufficient in those instances where the annual mean exceeded the NAAQS level. See existing Part 50 App. N 2.1 (b). The EPA proposed to also allow 11 or more samples per quarter as an acceptable minimum if the calculated annual standard design value exceeds the level of the standard. The intent of this change was to prevent a site with a violating design value that is made up of one (or more) annual means under the level of the NAAQS from not being used for regulatory purposes just because one (or more) of the quarters of the year(s) under the NAAQS level has less than 75% data capture. One commenter voiced a general concern over the lack of uniformity in completeness criteria but the other commenters supported the change. Taking these comments into consideration, EPA is revising appendix N as proposed with regard to this issue.

A second proposed change in the data completeness requirements would incorporate data substitution logic for situations where the proposed 11 samples per quarter minimum is not met. Consistent with existing guidance and practice (implementing current App. N 2.1 (c)), EPA proposed to incorporate the following requirement into appendix N: a quarter with less than 11 samples would be complete and valid if, by substituting an historically low 24-hr value for the missing samples (up to the 11 minimum), the results yield an annual mean, spatially averaged annual mean, and/or annual standard design value that exceeds the level of the standard. The EPA proposed to implement this procedure for making comparisons to the NAAQS and not to permanently alter the reported data. The EPA considered this a very conservative means of imputing data (and increasing the opportunities for using monitoring data that otherwise are valid), but solicited comment on the proposed approach. Several comments were received on this approach and the majority favored it. However, two commenters (NESCAUM and a constituent State) suggested a limit of one quarter (out of the 12 in a 3-year period) where the substitutions could be made. They suggested the limitation because they were concerned that the absence of a significant amount of data is an indication that site operator and/or equipment problems exist. The EPA shares this concern but observes that the method protocol itself guards against excessive utilization. The more missing values that are potentially substituted with the method effectively reduce the chance of a valid result (*i.e.*, a usable design value). Taking these comments into consideration, EPA is revising appendix N as proposed with regard to this issue.

With regard to the 24-hour $PM_{2.5}$ standard, EPA proposed to revise appendix N to include a special formula (Equation 6 in the proposed rule, 71 FR 2702) for computing annual 98th percentile values when a site operates on an approved seasonal sampling schedule. This formula was previously stated only in guidance documentation (EPA, 1999) but was utilized, where appropriate, in official OAQPS design value calculations. No adverse comments were received on this addition.

The proposed revisions to appendix N also incorporated language explicitly stating that 98th percentiles (for both regular and seasonal sampling schedules) were to be based on the *applicable* number of samples rather than the *actual* number of samples. The EPA proposed that both annual 98th percentile equations (proposed Equations 5 and 6) would reflect this approach. The EPA acknowledges that it made an error in the placement of the "applicable number of samples" references into the denominator of the special seasonal 98th percentile formula (Equation 6) and has restored the equation to its original form. The EPA notes that the special season formula already takes into consideration oversampling in low periods. Furthermore, because the "applicable number of samples" was removed from the seasonal formula, there was no need to stipulate that "seasons" could not divide months; that proposed requirement was only necessary to accommodate the calculation of "applicable number."

The EPA solicited comment on the "applicable number of samples" concept and calculation and received several comments on the concept. One commenter endorsed it without discussion, one commenter did not object to it but noted that it was difficult to program, and another commenter thought that the concept unnecessarily complicates matters and favored the use of "scheduled number of samples" instead. Two commenters said that it would be an acceptable approach if it still permitted "extra" sampling at the end of a month to make up for missed samples. The EPA notes that it has never endorsed this "extra" sampling practice for the 24-hour $PM_{2.5}$ standard, so that the commenter's premise is incorrect. The EPA agrees with comments that expressed concerns about this calculation being too complicated and, therefore, has simplified the procedure in a manner that corresponds to the calculation of

data capture. The applicable number of samples for a given year is now defined as simply the sum of the number of completed scheduled ("creditable") samples for the year. The new appendix N defines the new term, "creditable" and describes its use in calculating data capture rates and "applicable number." For sites that sample correctly (*i.e.* don't oversample at the end of the month), the simpler "applicable number" procedure will produce the same result as the proposed calculation.

To simplify the regulatory language, as proposed, EPA is revising appendix N to eliminate the equation computational examples. The EPA will provide extensive computational examples in forthcoming guidance documents.

4. Conforming Revisions

As proposed, EPA is revising terminology and data handling procedures associated with exceptional events to conform to rules which EPA proposed to implement the recent amendment to CAA section 319 (42 U.S.C. 7619) by section 6013 of the Safe, Accountable, Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU) (Pub. L. 109–59). The EPA proposed rules to address exceptional events on March 10, 2006 (71 FR 12592). The EPA is replacing the term currently used in appendix N.1(b)—uncontrollable or natural events—with "exceptional events," corresponding with the term used in the recent amendment. (Because this revision makes only a semantic change to existing appendix N, EPA believes the change is consistent with section 6013(b)(4) of SAFETEA–LU, which provided that EPA continue to apply existing appendix N of part 50 (among others) until the effective date of rules implementing the exceptional event provisions in amended section 319 of the CAA.)[69]

B. Proposed Appendix P—Interpretation of the National Ambient Air Quality Standards for $PM_{10-2.5}$

The EPA proposed to add appendix P to 40 CFR Part 50 in order to add data handling procedures for the proposed 24-hour $PM_{10-2.5}$ standard. Since the current 24-hour PM_{10} standard is being retained and a $PM_{10-2.5}$ standard is not being implemented, the proposed new appendix P (on interpreting the proposed 24-hour $PM_{10-2.5}$ standard) is not being added.

[69] EPA will answer all comments raising substantive issues relating to the natural events policy when it finalizes the pending exceptional events proposal.

C. Amendments to Appendix K—Interpretation of the National Ambient Air Quality Standards for PM_{10}

Because the Administrator has decided to retain the current 24-hour PM_{10} standard but to revoke and not replace the annual PM_{10} standard, some changes are required to appendix K to 40 CFR Part 50 on interpreting the primary and secondary NAAQS for PM_{10}. The modifications principally entailed simply removing the obsolete annual standard related sections. However some typographical corrections were also made to some of the remaining sections related to the 24-hour standard; a spelling error was corrected and certain equal signs (=) were changed to plus signs (+) in the illustrative examples found in section 3 of the appendix in order to correct obvious mistakes in arithmetic. For readers' convenience, EPA is reprinting the entire Appendix K in the rule section of this notice, but is not reopening or reconsidering any parts of the Appendix except those discussed above.

VI. Reference Methods for the Determination of Particulate Matter as $PM_{10-2.5}$ and $PM_{2.5}$

A. Appendix O to Part 50—Reference Method for Determination of Coarse Particulate Matter as $PM_{10-2.5}$ in the Atmosphere

The EPA proposed a new reference method (FRM) for measuring mass concentrations of coarse particles ($PM_{10-2.5}$) in ambient air as a new Appendix O to 40 CFR part 50.71 FR 2703. Although this method can fulfill a variety of PM monitoring objectives, its primary purpose is to serve as the standard of comparison for determining the adequacy of alternative "equivalent" methods for use in lieu of the FRM. *Id.* at 2687–88. In conjunction with additional analysis, this method may be used to develop speciated data. The EPA expects to designate such alternative methods as equivalent methods (FEMs) under revised provisions of 40 CFR part 53, published elsewhere in today's **Federal Register**. The EPA is finalizing the FRM for $PM_{10-2.5}$, even though a NAAQS for $PM_{10-2.5}$ is not being adopted. An official FRM will be an important element in facilitating consistent research on $PM_{10-2.5}$ air quality and health effects and in promoting the commercial development of FEMs. In a separate final rule amending 40 CFR part 58 elsewhere in today's **Federal Register**, the EPA is promulgating a requirement that States deploy about 60 FRM or FEM $PM_{10-2.5}$ monitors as part of a new National Core (NCore) multi-pollutant monitoring stations. The EPA also plans to negotiate with some States for additional NCore stations which would include $PM_{10-2.5}$ monitors.

The $PM_{10-2.5}$ reference method is a difference method based on separate, concurrent measurements of PM_{10} and $PM_{2.5}$, with the $PM_{10-2.5}$ measurement being the result of subtraction of the $PM_{2.5}$ measurement from the corresponding PM_{10} measurement. The 24-hour integrated measurements are based on conventional, low-volume filter samples of particulate matter analyzed gravimetrically after a period of moisture and temperature equilibration. Although the component PM_{10} and $PM_{2.5}$ filter samples can be subsequently analyzed chemically, no actual, physically separated $PM_{10-2.5}$ sample is produced by the method for chemical species analysis. The EPA anticipates that one or more alternative methods that do provide $PM_{10-2.5}$ samples that are completely or nearly completely separated physically for species analysis (such as the dichotomous sampler method) will become available as an FEM.

The substantial advantages of the method and the rationale for its selection as the FRM for $PM_{10-2.5}$ are discussed in the proposal (71 FR 2687). In that discussion, EPA acknowledges that the method does not provide a direct measurement of $PM_{10-2.5}$, has some significant shortcomings, and likely will not ideally meet all needs for monitoring $PM_{10-2.5}$ in the ambient air. The EPA indicated that although the method is readily usable in routine monitoring networks, it is clearly less than optimally suited for such use. Instead, EPA expects that alternative FEMs that typically offer some substantial advantage or advantages over the FRM will become the principle methods deployed for routine monitoring. Further, EPA anticipates that self-contained, automated FEMs will become available to provide near real-time, hourly monitoring data availability and ease the monitoring burdens of monitoring agencies. Although the FRM will likely be used initially in monitoring applications because of its conventional nature and similarity to the widely used $PM_{2.5}$ FRM, ultimately its principle purpose will be as the standard of reference for determining the adequacy of alternative, candidate FEMs and for assessing the quality of $PM_{10-2.5}$ monitoring data obtained in monitoring networks, particularly networks using alternative FEMs. The FRM may thus be used on a voluntary basis by states wishing to deploy $PM_{10-2.5}$ monitors prior to the

January 1, 2011 deadline for operation of $PM_{10-2.5}$ monitors at NCore multi-pollutant sites (a requirement of the final rule amending 40 CFR part 58, elsewhere in today's **Federal Register**), although many of the required monitors operating at NCore sites in 2011 and beyond may be FEMs.

After considering alternative methodologies and weighing the various pros and cons of other methods, as also discussed in the proposal preamble, the EPA concluded that the proposed method is the best method currently available to serve these purposes, while also being readily usable for many initial monitoring applications. The Ambient Air Monitoring and Methods Subcommittee of the Clean Air Scientific Advisory Committee (CASAC) concurs with this assessment and approach, recommending that EPA adopt the difference method as the FRM, but that it ultimately be used primarily as a benchmark for evaluating the performance of continuous as well as other direct-measuring filter-based integrated methods (Henderson, 2005c).

Of the relatively few comments received on the proposed FRM, most raised concern about some of the same shortcomings of the method that had already been considered by EPA in selecting the method (and by the CASAC in concurring with EPA's approach). No comments presented any issues that resulted in any changes to the method. Thus, the FRM is being promulgated today (in Appendix O), with the only change being deletion of the reference to national ambient air quality standards in section 1.1 of the method, since the EPA is not using $PM_{10-2.5}$ as the indicator in the NAAQS addressing thoracic coarse particles.

One comment raised concern about the relationship of the new $PM_{10-2.5}$ FRM to the requirements of Section 6012 of the SAFETEA–LU, under which the EPA is to "develop a Federal reference method to measure directly particles that are larger than 2.5 micrometers in diameter without reliance on subtracting from coarse particle measurements those particles that are equal to or smaller than 2.5 micrometers in diameter." As discussed in the proposal preamble at 71 FR 2690, EPA believes that this FRM does not conflict with either the specific language or intent of the SAFETEA–LU Act. The new FRM, together with the additions to part 53 (published elsewhere in this **Federal Register**) that will allow designation of FEMs for monitoring $PM_{10-2.5}$, will provide a strong incentive to stimulate the further commercial development and refinement of new or existing methods for $PM_{10-2.5}$, most of which will not rely on subtraction of fine mode particle measurements from coarse mode particle measurements. Further, EPA is actively investigating the possibility that a dichotomous-based method might ultimately provide a more direct means of measuring the coarse fraction of PM_{10}. Within the time frame prescribed by the SAFETEA–LU, it appears very likely that at least one such method will be shown to achieve an adequate level of performance and may therefore be identified and utilized as a "reference method". The terms of the SAFETEA–LU Act do not require that the Agency promulgate a non-difference method as either the sole FRM or as an alternative FRM as specifically defined in part 53. Until such a new, more direct method is demonstrated to be suitable and adequate and becomes commercially available, the difference-based FRM of Appendix O provides a reliable, proven measurement method which can be successfully implemented immediately. The CASAC agreed that none of the direct sampling methods is presently sufficiently reliable for use as an FRM, Henderson, 2005c, but that suitable direct measurement methods could be developed quickly enough to become approved as equivalent methods in a planned monitoring network.

The salient technical aspects of the FRM are provided in the proposal preamble (71 FR 2690). The dual samplers specified in the FRM are essentially identical to the sampler specified in the $PM_{2.5}$ FRM (40 CFR part 50, appendix L) except for removal of the $PM_{2.5}$ WINS impactor particle separator from the sampler used for PM_{10}. Operational procedures and most other aspects are also similar or identical to those for the $PM_{2.5}$ FRM. One notable condition is that the PM_{10} sampler of the $PM_{10-2.5}$ FRM must meet the higher standards of performance and manufacture of appendix L rather than the somewhat lesser requirements for conventional PM_{10} samplers in 40 CFR part 50, appendix J. Thus, conventional PM_{10} FRM samplers will not be acceptable for use as part of a $PM_{10-2.5}$ FRM sampler pair. But both the PM_{10} and $PM_{2.5}$ component measurements obtained incidental to $PM_{10-2.5}$ measurements would be valid as PM_{10} or $PM_{2.5}$ measurements under the monitoring requirements of 40 CFR part 58, provided they are sited at the appropriate spatial scale. However, since such PM_{10} samplers meet higher standards of performance than conventional PM_{10} samplers, the measurements need to be differentiated from conventional PM_{10} measurements (*e.g.* by a descriptor such as PM_{10c}). Also, conventional PM_{10} measurements are reported based on standard temperature and pressure, whereas PM_{10c} measurements are reported based on actual local conditions of temperature and pressure.

The EPA designation of specific, commercial candidate $PM_{10-2.5}$ FRM samplers will be based on an application and on consideration in accordance with new or revised provisions of 40 CFR part 53, published elsewhere in this **Federal Register**. Since $PM_{2.5}$ FRM samplers have been in use for several years and are readily available, EPA designation of $PM_{10-2.5}$ FRM sampler models based on one or more currently available $PM_{2.5}$ sampler models is expected to occur soon after promulgation. The two samplers of the $PM_{10-2.5}$ FRM sampler pair would be required to be of the same make and model and matched design and fabrication so that they are essentially identical (except that one would not have a $PM_{2.5}$ particle separator). The samplers may be of either single-filter or multiple-filter (sequential-sample) design, as long as both are of the same type, design, and configuration. For a commercial sampler that has already been designated as a $PM_{2.5}$ FRM, no further testing under part 53 would be required for designation as a $PM_{10-2.5}$ FRM, although the sampler manufacturer would have to submit a formal, brief application under part 53. Users may assemble their own $PM_{10-2.5}$ sampler pair using existing $PM_{2.5}$ samplers of matched model or design by converting one of the samplers to a PM_{10c} sampler, provided that the specific sampler pair has been previously designated by the EPA as a $PM_{10-2.5}$ FRM under part 53.

A $PM_{2.5}$ sampler pair consisting of samplers that are slightly dissimilar or have some minor design or model variations (and one sampler is configured as a PM_{10c} sampler) may be considered for designation by EPA as a Class I FEM under revised part 53. An application for an FEM determination would need to be submitted under part 53, and some supplemental or special tests may be required. Also, a pairing of slightly dissimilar samplers that has not been designated by EPA as an FRM or Class I FEM may be considered for approved use in $PM_{10-2.5}$ monitoring networks as a user-modification of an FRM under section 2.8 of appendix C to 40 CFR part 58.

B. Amendments to Appendix L—Reference Method for the Determination of Fine Particulate Matter (as $PM_{2.5}$) in the Atmosphere

In connection with the proposal of a new FRM for $PM_{10-2.5}$, the EPA also proposed (71 FR 2691) minor technical changes to the FRM for $PM_{2.5}$ (40 CFR Part 50, appendix L). EPA is adopting these changes as proposed. These changes are to provide improvements in the efficiency of the method in monitoring network operations without altering the method's performance.

The most significant change is the addition of an alternative $PM_{2.5}$ particle size separator, specifically, a very sharp cut cyclone (VSCC™) manufactured by BGI Incorporated, Waltham, MA. FRM samplers now may be configured with either the original WINS impactor or the alternative cyclone separator, and existing FRM samplers may be retrofitted by users with the cyclone, if desired. Sampler users wishing to retrofit their samplers should contact the sampler manufacturer to obtain the correct BGI VSCC™ model along with the associated installation, operation, and maintenance instructions specific to the sampler model, and a new designated method label to be attached to the sampler. The seven sampler models configured with the BGI VSCC™ that have been designated as FEMs will be re-designated as reference methods, and owners of such sampler should contact the sampler manufacturer to receive a new reference method label for the sampler.

Another change is substitution of an improved type of impactor oil for the original $PM_{2.5}$ WINS particle size separator to correct an occasional cold-weather performance issue with the originally specified oil. Finally, minor increases in the time limits for sample retrieval and sample weighing were proposed, as were minor reductions in the sampler data output reporting requirements. Justifications for these changes are discussed in the proposal preamble. Of the very few comments received in connection with these proposed changes, all were supportive. Accordingly, the changes are adopted as proposed.

VII. Issues Related to Implementation of PM_{10} Standards

Issues related to implementation of the NAAQS are not relevant to the Administrator's decisions regarding whether it is appropriate to set or revise a standard. For this reason, EPA has not addressed implementation-related issues in preceding sections, nor has it addressed public comments regarding implementation. The EPA identified issues regarding transition to or implementation of the standards promulgated in this rule in an advance notice of proposed rulemaking (ANPR) on Transition to New or Revised Particulate Matter National Ambient Air Quality Standards (71 FR 6718–6729, February 9, 2006). In the ANPR, EPA solicited comment on a wide range of issues related to both the fine and coarse particle NAAQS, including the schedules for implementation of these standards and the requirements that would be applicable if any PM NAAQS were revoked. The public comment period for the ANPR ended on July 10, 2006. The EPA is currently reviewing the public comments received. In the near future, EPA intends to address, as necessary, issues such as designations, conformity, and new source review, related to implementation of today's final rule. In this section, EPA highlights a few issues that may arise as an immediate consequence of today's final decision to retain the 24-hour PM_{10} standards but revoke the annual PM_{10} standards, and restates existing policies and practices to address several concerns raised by commenters.

A. Summary of Comments Received on Transition

Many commenters, particularly State and local air pollution control agencies and Tribes, but also environmental and public health groups, voiced strong concerns about EPA's proposal to revoke current annual PM_{10} standards everywhere upon promulgation of this final rule, and to revoke, upon finalization of a primary 24-hour standard for $PM_{10-2.5}$, the current 24-hour PM_{10} standard everywhere except in 15 large urbanized areas (with population greater than 100,000) that have at least one monitor violating the 24-hour PM_{10} standard based on the most recent three years of air quality data. For these few areas, EPA proposed to retain the 24-hour PM_{10} standard until designations were completed under a final 24-hour $PM_{10-2.5}$ standard. While a few local government commenters recommended that one or another of the 15 areas be dropped from this list—i.e., recommended that the 24-hour PM_{10} standard should be retained in fewer locations—most commenters expressing views on transition suggested that EPA was being too hasty in dismantling existing PM_{10} protections. Pointing to long delays in the implementation timeline for the 1997 $PM_{2.5}$ standards due to litigation, such that designations were not completed for eight years after promulgation of the final rule, these commenters suggested that the 24-hour PM_{10} standard should remain in place everywhere until designations were complete under the 24-hour $PM_{10-2.5}$ standard, or even until $PM_{10-2.5}$ SIPs had been submitted by States. Some Tribal, State and local commenters suggested that the PM_{10} standard should be retained permanently in all areas where the $PM_{10-2.5}$ standard did not apply by virtue of the monitoring requirements, which limited NAAQS comparable monitors to sites that met the five-point site suitability test outlined in the monitoring rule. Other commenters maintained that EPA has no authority to revoke the PM_{10} standards or the specific pollution controls mandated in Title I Subpart 4 for PM_{10} nonattainment areas.[90]

The EPA notes that the Administrator's decision to retain the current 24-hour PM_{10} standard alleviates these concerns. Because the 24-hour PM_{10} standard is generally controlling, as described above in section III.D.2, retention of this standard ensures the continuation of existing public health protections. The EPA further believes that it has the legal authority to revoke the annual PM_{10} standard, and addresses this issue in detail in the Response to Comments document.

B. Impact of Decision on PM_{10} Designations

The EPA notes that because it is retaining the current 24-hour PM_{10} standards, new nonattainment designations for PM_{10} will not be required under the provisions of the Clean Air Act. As established in Section 107(d)(1) of the Act, the only time EPA is obligated to designate areas as attainment or nonattainment is after it promulgates or revises a NAAQS. Under an existing standard, all redesignations are at the Administrator's discretion: EPA has no legal obligation to redesignate an area even if a monitor should register a violation of that standard (see CAA Section 107(d)(3)). Thus, this final decision does not affect existing PM_{10} nonattainment designations. This is consistent with past practice. For example, when EPA decided not to revise the ozone standards in 1993 or the SO_2 standards in 1996, it did not revisit prior designations or designate any new areas as nonattainment. The EPA does regard air quality violations seriously, and does expect States to take actions to reduce

[90] These comments and EPA's responses to the issues raised by commenters are discussed in greater detail in the Response to Comments document.

air quality to healthy levels in any areas that are experiencing violations. However, EPA recognizes that there are other ways to address such violations besides redesignating an area as nonattainment. For example, EPA can work directly with a State and nearby industries to take appropriate actions to reduce emissions that are contributing to the violation. The EPA has worked in this way with States in the past. Of course, States may request redesignation of an area, either from nonattainment to attainment, or from attainment to nonattainment, based on the most recent air quality data available, if they choose to do so. In addition, both transportation and general conformity will continue to apply to all PM_{10} nonattainment and maintenance areas since no designations are changing. However, because EPA is revoking the annual PM_{10} standard in this final rule, after the effective date of this rule conformity determinations in PM_{10} areas will only be required for the 24-hour PM_{10} standard; conformity to the annual PM_{10} standard will no longer be required. The EPA will address specific conformity issues related to the revocation of the annual PM_{10} standard either in future guidance or in another public document. The EPA also notes that PSD increments and baseline years will not be affected by this decision.

The EPA is retaining the current 24-hour PM_{10} standards and revoking the annual PM_{10} standards. Today's rule does not change any existing guidance related to the PM_{10} NAAQS as it applies to the 24-hour PM_{10} standards, and to the extent that modifications to the existing guidance are needed in response to today's action, EPA will make such modifications in the near future.

As described in the revisions to Part 53/58 appearing elsewhere in today's **Federal Register**, EPA believes a reduction in the size of the existing monitoring networks for certain pollutants, including PM_{10}, for which the large majority of monitors record no NAAQS violations, is appropriate as a way to free up resources for higher priority monitoring objectives. The current minimum PM_{10} network requirements are based on the population of a metropolitan statistical area (MSA) and its historical PM_{10} air quality. This focus on larger urban areas is consistent with EPA's belief that it is appropriate to target an indicator for thoracic coarse particles toward urban and industrial areas, where the ambient mix of thoracic coarse particles is dominated by emissions from particular types of sources. See sections III.C.2 and III.C.3 above. To the extent that States and Tribes are considering reducing the total number of PM_{10} monitors deployed, EPA believes, consistent with the basis for retaining the 24-hour PM_{10} standard, that priority should be given to maintaining monitors sited in urban and industrial areas.

In addition, if States and Tribes are considering deploying new PM_{10} monitors, EPA recommends, again consistent with the basis for retaining the 24-hour PM_{10} standard, that those monitors be placed in areas where there are urban and/or industrial sources of thoracic coarse particles. Furthermore, consistent with the monitors used in studies that informed the Administrator's decision on the level of the standard (see section III.D above), EPA recommends that any new PM_{10} monitors be placed in locations that are reflective of community exposures at middle and neighborhood scales of representation, and not in source-oriented hotspots.

As summarized briefly above in section III.E and described in detail in section V.E.1 of the monitoring rule published elsewhere in today's **Federal Register**, EPA is also establishing requirements for a new multi-pollutant monitoring network that will include approximately 75 $PM_{10-2.5}$ monitors that will speciate according to the composition as well as size of the particles. These speciated $PM_{10-2.5}$ monitors are a critical part of EPA's research program on coarse particles, and will be sited in both urban and rural locations. It is EPA's expectation that these monitors will help alleviate the current deficit of information regarding the public health impacts of $PM_{10-2.5}$ mixes in different locations.[21]

C. Impact of Decision on State Implementation Plans (SIPs) and Control Obligations

The EPA's decision today to retain the PM_{10} NAAQS does not establish new legal obligations beyond those that already exist. Specifically, this final rule does not obligate States to revise SIPs or to create new obligations to control particular sources. In response to comments regarding potential impacts of any coarse particle standard on agricultural and mining sources, EPA notes that the NAAQS do not create emissions control obligations for individual sources or groups of sources. In this particular case, even if an individual source were shown to contribute to an exceedance of the 24-hour PM_{10} standard, this would not necessarily result in regulation of that source. Decisions about which sources to control are generally made by the State in the context of developing or revising SIPs. Given that the available evidence regarding adverse health effects associated with exposure to thoracic coarse particles is strongest with respect to urban and industrial ambient mixes of those particles, EPA encourages States to focus control programs on urban and industrial sources to the extent that those sources are contributing to air quality violations. This would help to ensure that resources expended on implementing the 24-hour PM_{10} standard realize the maximum public health and welfare benefits.

With regard to emissions of thoracic coarse particles from agricultural sources, EPA recognizes that the United States Department of Agriculture (USDA) has been working with the agricultural community to develop conservation systems and activities to control coarse particle emissions. Based on current ambient monitoring information, these USDA-approved conservation systems and activities have proven to be effective in controlling these emissions in areas where coarse particles emitted from agricultural activities have been identified as a contributor to violation of the NAAQS. The EPA concludes that where USDA-approved conservation systems and activities have been implemented, these systems and activities have satisfied the Agency's reasonably available control measure and best available control measure requirements. The EPA believes that in the future, when properly implemented, USDA-approved conservation systems and activities should satisfy the requirements for reasonably available control measures or best available control measures. The EPA will work with States to identify appropriate measures to meet their RACM or BACM requirements, including site-specific conservation systems and activities. The EPA will continue to work with USDA to prioritize the development of new conservation systems and activities;

[21] In addition, EPA notes that the Agency's National Center for Environmental Research recently issued a Request for Proposals on "Sources, Composition, and Health Effects of Coarse Particulate Matter" which is designed to (1) improve understanding of the type and severity of health outcomes associated with exposure to $PM_{10-2.5}$; (2) improve understanding of subpopulations that may be especially sensitive to $PM_{10-2.5}$ exposures including minority populations, highly exposed groups, and other susceptible groups; (3) characterize and compare the influence of mass, composition, source characteristics and exposure estimates in different locations and differences in health outcomes, including comparisons in rural and urban areas; and (4) characterize the composition and variability of $PM_{10-2.5}$ in towns, cities or metropolitan areas, including comparisons of rural and urban areas.

demonstrate and improve, where necessary, the control efficiencies of existing conservation systems and activities; and ensure that appropriate criteria are used for identifying the most effective application of conservation systems and activities.

The EPA does not construe the Clean Air Act (CAA) to require that the Agency make an independent determination as to whether a PSD increment is violated in any specific State or Tribal reservation. The EPA has the discretion to inquire into these matters and call for revisions to a State's SIP if an EPA investigation concluded with EPA finding that the PSD increment is being exceeded. The EPA's regulations at 40 CFR 51.166(a)(3) directs a state to make revisions to its SIP if EPA or a State finds such an exceedance. However, this regulation does not require that EPA conduct its own investigation and make such a finding in all cases where a State has completed a periodic review and submitted its findings to EPA. Oversight of this nature is a matter within EPA's discretion. Likewise, section 110(k)(5) of the Clean Air Act does not require that EPA periodically investigate and determine whether a SIP is sufficient to protect the PSD increments. The EPA has the discretion to decide when it is appropriate to exercise its oversight authority and inquire into these issues in a specific State or Tribal reservation. When EPA exercises this discretion and finds an exceedance of the increments or another SIP deficiency, EPA is then required to issue a SIP call under section 110(k)(5) of the CAA. However, the CAA affords EPA discretion on whether to make a determination that a state SIP is deficient. See, *New York Public Interest Research Group* v. *Whitman*, 321 F.3d 316, 331 (2d Cir. 2003) (considering analogous provision of the CAA addressing EPA oversight of state Title V operating permit programs).

D. Consideration of Fugitive Emissions for New Source Review (NSR) Purposes

Under the current NSR regulations, for purposes of determining whether a stationary source qualifies as a major stationary source, that source must include fugitive emissions in calculating the total amount of a pollutant directly emitted, or the potential to emit that pollutant, only if the source is associated with a source category listed by the Administrator pursuant to notice and comment rulemaking in accordance with Section 302(j) of the Clean Air Act (CAA). Agricultural and mining sources are generally not among those listed by the Administrator. Therefore, fugitive emissions from sources in these categories are generally not included in making major source determinations. However, the current NSR regulations require that once any source qualifies as a major stationary source, that source must count all fugitive emissions toward determining whether an emissions increase results in a major modification of that source regardless of whether the source is associated with a source category listed by the Administrator. On July 11, 2003, we received a petition for reconsideration of the current NSR regulations relating to whether fugitive emissions must be counted for purposes of determining whether a major modification occurs. In January 2004, we agreed to reconsider this issue, and we expect to propose changes to the existing regulations in the near future.

E. Handling of PM_{10} Exceedances Due to Exceptional Events

The EPA recognizes that PM_{10} exceedances may be caused, in whole or in part, by exceptional events, including natural events such as windstorms. In some of these instances, the PM_{10} exceedance(s) may also be associated with anthropogenic emissions that contribute to total PM_{10} concentrations. Under EPA's March 2006 *Proposed Rule on the Treatment of Data Influenced by Exceptional Events* (71 FR 12592–12610), and consistent with historical practice, an exceedance may be treated as an exceptional event even though anthropogenic sources such as agriculture and mining emissions contribute to the exceedance. (EPA's Exceptional Events Rule will be finalized in March 2007 and will discuss this issue in more detail.)

VIII. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under section 3(f)(1) of Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is an "economically significant regulatory action" because it is likely to have an annual effect on the economy of $100 million or more. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under EO 12866 and any changes made in response to OMB recommendations have been documented in the docket for this action [Docket ID No. EPA–HQ–OAR–2001–0017].

In addition, EPA prepared a regulatory impact analysis (RIA) of the potential costs and benefits associated with this action, entitled "Regulatory Impact Analysis for Particulate Matter National Ambient Air Quality Standards" (September 2006). The RIA estimates the nationwide costs and monetized human health and welfare benefits of attaining two alternatives to the current suite of $PM_{2.5}$ NAAQS (15 $\mu g/m^3$ annual, 65 $\mu g/m^3$ daily). Specifically, the RIA compares the current standards to the proposed alternative of 15 $\mu g/m^3$ annual, 35 $\mu g/m^3$ daily and a tighter alternative of 14 $\mu g/m^3$ annual, 35 $\mu g/m^3$ daily. The RIA contains illustrative analyses that consider a limited number of emissions control scenarios that States and Regional Planning Organizations might implement to achieve the 1997 $PM_{2.5}$ NAAQS and these alternative $PM_{2.5}$ NAAQS. It calculates the incremental costs that might be incurred between the base year of 2015, which is the year by which States must all be in attainment with the 1997 $PM_{2.5}$ standards (15 $\mu g/m^3$ annual, 65 $\mu g/m^3$ daily), and 2020, which is the final date by which States would implement controls to attain the revised $PM_{2.5}$ standards.

As discussed above in section I.B, the Clean Air Act and judicial decisions make clear that the economic and technical feasibility of attaining ambient standards are not to be considered in setting or revising NAAQS, although such factors may be considered in the development of State plans to implement the standards. Accordingly, although an RIA has been prepared, the results of the RIA have not been considered in issuing this final rule.

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* There are no information collection requirements directly associated with revisions to a NAAQS under section 109 of the CAA.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business that is a small industrial entity as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, EPA has concluded that this action will not have a significant economic impact on a substantial number of small entities. This rule will not impose any requirements on small entities. Rather, this rule establishes national standards for allowable concentrations of particulate matter in ambient air as required by section 109 of the CAA. See also *ATA I* at 1044–45 (NAAQS do not have significant impacts upon small entities because NAAQS themselves impose no regulations upon small entities).

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and Tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and Tribal governments, in the aggregate, or to the private sector, of $100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Today's final rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local, or Tribal governments or the private sector. The rule imposes no new expenditure or enforceable duty on any State, local or Tribal governments or the private sector, and EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments. Furthermore, as indicated previously, in setting a NAAQS EPA cannot consider the economic or technological feasibility of attaining ambient air quality standards, although such factors may be considered to a degree in the development of State plans to implement the standards. See also *ATA I* at 1043 (noting that because EPA is precluded from considering costs of implementation in establishing NAAQS, preparation of a Regulatory Impact Analysis pursuant to the Unfunded Mandates Reform Act would not furnish any information which the court could consider in reviewing the NAAQS). Accordingly, EPA has determined that the provisions of sections 202, 203, and 205 of the UMRA do not apply to this final decision. The EPA acknowledges, however, that any corresponding revisions to associated SIP requirements and air quality surveillance requirements, 40 CFR part 51 and 40 CFR part 58, respectively, might result in such effects. Accordingly, EPA has addressed unfunded mandates in the notice that announces the revisions to 40 CFR part 58, and will, as appropriate, address unfunded mandates when it proposes any revisions to 40 CFR part 51.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

At the time of proposal, EPA concluded that the proposed rule would not have federalism implications. The EPA stated that the proposed rule would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. However, EPA recognized that States would have a substantial interest in this rule and any corresponding revisions to associated SIP requirements and air quality surveillance requirements, 40 CFR part 51 and 40 CFR part 58, respectively. Therefore, in the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicited comment on the rule from State and local officials at the time of proposal.

One commenter who opposed EPA's proposed decision on the standards for thoracic coarse particles stated that the decision violated E.O. 13132. The commenter argued that EPA's proposal to replace the PM_{10} standards with a new 24-hour $PM_{10-2.5}$ standard based on a qualified indicator would substantially impact CAA section 107 which establishes that the States have primary responsibility for implementation of the NAAQS. Specifically, the commenter stated that the proposed rule language establishing that "agricultural sources, mining sources, and other similar sources of crustal material shall not be subject to control in meeting this standard" was a clear infringement upon States' authority with regard to implementation of the NAAQS. The EPA notes that in light of the final decision to retain the PM_{10} indicator, and the 24-hour PM_{10} NAAQS, the concern voiced by this commenter is no longer relevant. The final rule does not exclude any sources

from control under the 24-hour PM_{10} standard.

Therefore, EPA concludes that this final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The rule does not alter the relationship between the Federal government and the States regarding the establishment and implementation of air quality improvement programs as codified in the CAA. Under section 109 of the CAA, EPA is mandated to establish NAAQS; however, CAA section 116 preserves the rights of States to establish more stringent requirements if deemed necessary by a State. Furthermore, this rule does not impact CAA section 107 which establishes that the States have primary responsibility for implementation of the NAAQS. Finally, as noted above in section E on UMRA, this rule does not impose significant costs on State, local, or Tribal governments or the private sector. Thus, Executive Order 13132 does not apply to this rule.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This rule concerns the establishment of PM NAAQS. The Tribal Authority Rule gives Tribes the opportunity to develop and implement CAA programs such as the PM NAAQS, but it leaves to the discretion of the Tribe whether to develop these programs and which programs, or appropriate elements of a program, they will adopt.

Although EPA determined at the time of proposal that Executive Order 13175 did not apply to this rule, EPA contacted tribal environmental professionals during the development of this rule. The EPA staff participated in the regularly scheduled Tribal Air call sponsored by the National Tribal Air Association during the summer and fall of 2005 as the proposal was under development, as well as the call in the spring of 2006 during the public comment period on the proposed rule. The EPA sent individual letters to all federally recognized Tribes within the lower 48 states and Alaska to give Tribal leaders the opportunity for consultation, and EPA staff also participated in Tribal public meetings, such as the National Tribal Forum meeting in April 2006, where Tribes discussed their concerns regarding the proposed rule. Furthermore, the Administrator discussed the proposed PM NAAQS with members of the National Tribal Caucus and with leaders of individual Tribes during the spring and summer of 2006, in advance of his final decision.

During the course of these meetings and in written comments submitted to the Agency, Tribal commenters expressed significant concerns about the implications of the proposed rule for Tribes. In particular, Tribes strongly opposed the proposed qualified $PM_{10-2.5}$ indicator and the proposed monitor site-suitability requirements, especially the requirement that monitors used for comparison with the NAAQS be located within urbanized areas with a minimum population of 100,000. Tribal commenters pointed out that this would virtually exclude Tribes from applying the $PM_{10-2.5}$ standards because very few Tribal sites would meet this criterion. Tribes stated that EPA had violated its Trust Responsibility to Tribes in three ways. First, the commenters claimed that EPA had failed to engage in meaningful consultation with Tribal leaders regarding the proposed qualified $PM_{10-2.5}$ indicator and other aspects of the proposed rule. Second, commenters claimed that the proposed 24-hour $PM_{10-2.5}$ standard would have serious adverse impacts on the existing level of health protection for Tribes. Third, Tribal commenters objected to the proposed exclusion of "agricultural sources, mining sources, and other similar sources of crustal material" from the proposed $PM_{10-2.5}$ indicator; like States, Tribes felt this provision was illegal and Tribal commenters argued this violated Tribal sovereignty. The EPA notes that its final decision to retain the current 24-hour PM_{10} standard, for the reasons noted above in Section III, without any qualifications or changes to the monitor siting requirements, effectively resolves the concerns raised by these commenters.

EPA has determined that this final rule does not have Tribal implications, as specified in Executive Order 13175. It does not have a substantial direct effect on one or more Indian Tribes, since Tribes are not obligated to adopt or implement any NAAQS. Thus, Executive Order 13175 does not apply to this rule.

G. Executive Order 13045: Protection of Children From Environmental Health & Safety Risks

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the rule on children, and explain why the regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This rule is subject to Executive Order 13045 because it is an economically significant regulatory action as defined by Executive Order 12866, and we believe that the environmental health risk addressed by this action may have a disproportionate effect on children. The NAAQS constitute uniform, national standards for PM pollution; these standards are designed to protect public health with an adequate margin of safety, as required by CAA section 109. However, the protection offered by these standards may be especially important for children because children, along with other sensitive population subgroups such as the elderly and people with existing heart or lung disease, are potentially susceptible to health effects resulting from PM exposure. Because children are considered a potentially susceptible population, we have carefully evaluated the environmental health effects of exposure to PM pollution among children. These effects and the size of the population affected are summarized in section 9.2.4 of the Criteria Document and section 3.5 of the Staff Paper, and the results of our evaluation of the effect of PM pollution on children are discussed in sections II and III of this preamble.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution or Use

This rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355 (May 22, 2001)) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The purpose of this rule is to establish NAAQS for PM. The rule does not

prescribe specific pollution control strategies by which these ambient standards will be met. Such strategies will be developed by States on a case-by-case basis, and EPA cannot predict whether the control options selected by States will include regulations on energy suppliers, distributors, or users. Thus, EPA concludes that this rule is not likely to have any adverse energy effects and does not constitute a significant energy action as defined in Executive Order 13211.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer Advancement Act of 1995 (NTTAA), Public Law 104–113, Section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

The final rule establishes requirements for environmental monitoring and measurement. Specifically, it establishes the FRM for $PM_{10-2.5}$ measurement (and slightly amends the FRM for $PM_{2.5}$). The FRM is the benchmark against which all ambient monitoring methods are measured. While the FRM is not a voluntary consensus standard, the equivalency criteria established in 40 CFR part 53 do allow for the utilization of voluntary consensus standards if they meet the specified performance criteria.

To the extent feasible, EPA employs a Performance-Based Measurement System (PBMS), which does not require the use of specific, prescribed analytic methods. The PBMS is defined as a set of processes wherein the data quality needs, mandates or limitations of a program or project are specified, and serve as criteria for selecting appropriate methods to meet those needs in a cost-effective manner. It is intended to be more flexible and cost effective for the regulated community; it is also intended to encourage innovation in analytical technology and improved data quality. Though the FRM requirements utilize performance standards for some aspects of monitor design, multiple performance standards defined for many combinations of PM type, concentration, and environmental conditions would be required to be sure that monitors certified to purely performance-based standards actually performed similarly in the field, which would in turn require extensive testing of each candidate monitor design. Therefore, it is not practically possible to fully define the FRM in performance terms. Nevertheless, our approach in the past has resulted in multiple brands of monitors qualifying as FRM for PM, and we expect this to continue. Also, the FRM described in this final rule and the equivalency criteria contained in the revisions to 40 CFR part 53 do constitute performance based criteria for the instruments that will actually be deployed for monitoring $PM_{10-2.5}$. Therefore, for most of the measurements that will be made and most of the measurement systems that make them, EPA is not precluding the use of any method, whether it constitutes a voluntary consensus standard or not, as long as it meets the specified performance criteria.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires Federal agencies to consider the impact of programs, policies, and activities on minority populations and low-income populations. According to EPA guidance, agencies are to assess whether minority or low-income populations face a risk or a rate of exposure to hazards that are significant and that "appreciably exceeds or is likely to appreciably exceed the risk or rate to the general population or to the appropriate comparison group" (EPA, 1998).

In accordance with Executive Order 12898, the Agency has considered whether these decisions may have disproportionate negative impacts on minority or low-income populations. This rule establishes uniform, national ambient air quality standards for particulate matter, and is not expected to have disproportionate negative impacts on minority or low income populations. The EPA notes that some commenters expressed concerns that EPA had failed to adequately assess the environmental justice implications of its proposed decisions, and that the proposed revisions to both the fine particle and coarse particle standards would violate the principles of environmental justice. In particular, numerous commenters criticized the proposed qualified $PM_{10-2.5}$ indicator, arguing that the exclusive urban focus of the indicator failed to protect large segments of the U.S. population (including Tribes and lower-income rural populations). The EPA believes that the final decision to retain the current nationally applicable 24-hour PM_{10} standard adequately addresses the concerns raised by these commenters, as discussed above in section III.

Further, some commenters were concerned that the proposed $PM_{2.5}$ standards would permit the continuation of disproportionate adverse health effects on minority and low-income populations because those populations are concentrated in urban areas where exposures are higher and are generally more susceptible (given lack of access to health care and prevalence of chronic conditions such as asthma). The EPA believes that the implications of the newly strengthened suite of $PM_{2.5}$ standards will reduce health risks precisely in the areas subject to the highest fine particle concentrations. Furthermore, the $PM_{2.5}$ NAAQS established in today's final rule are nationally uniform standards which in the Administrator's judgment protect public health with an adequate margin of safety. In making this determination, the Administrator expressly considered the available information regarding health effects among vulnerable and susceptible populations, such as those with preexisting conditions. Thus it remains EPA's conclusion that this rule is not expected to have disproportionate negative impacts on minority or low income populations.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA submitted a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective December 18, 2006.

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List of Subjects in 40 CFR Part 50

Environmental protection, Air pollution control, Carbon monoxide, Lead, Nitrogen dioxide, Ozone, Particulate matter, Sulfur oxides.

Dated: September 21, 2006.

Stephen L. Johnson,

Administrator.

■ For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 50—NATIONAL PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS

■ 1. The authority citation for part 50 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 2. Section 50.3 is revised to read as follows:

§ 50.3 Reference conditions.

All measurements of air quality that are expressed as mass per unit volume (*e.g.*, micrograms per cubic meter) other than for the particulate matter ($PM_{2.5}$) standards contained in §§ 50.7 and 50.13 shall be corrected to a reference temperature of 25 (deg) C and a reference pressure of 760 millimeters of mercury (1,013.2 millibars). Measurements of $PM_{2.5}$ for purposes of comparison to the standards contained in §§ 50.7 and 50.13 shall be reported based on actual ambient air volume measured at the actual ambient temperature and pressure at the monitoring site during the measurement period.

§ 50.6 [Amended]

■ 3. Section 50.6 is amended by removing and reserving paragraph (b).

■ 4. A new § 50.13 is added to read as follows:

§ 50.13 National primary and secondary ambient air quality standards for $PM_{2.5}$.

(a) The national primary and secondary ambient air quality standards for particulate matter are 15.0 micrograms per cubic meter ($\mu g/m^3$) annual arithmetic mean concentration, and 35 $\mu g/m^3$ 24-hour average concentration measured in the ambient air as $PM_{2.5}$ (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers) by either:

(1) A reference method based on appendix L of this part and designated in accordance with part 53 of this chapter; or

(2) An equivalent method designated in accordance with part 53 of this chapter.

(b) The annual primary and secondary $PM_{2.5}$ standards are met when the annual arithmetic mean concentration, as determined in accordance with appendix N of this part, is less than or equal to 15.0 $\mu g/m^3$.

(c) The 24-hour primary and secondary $PM_{2.5}$ standards are met when the 98th percentile 24-hour concentration, as determined in accordance with appendix N of this part, is less than or equal to 35 $\mu g/m^3$.

■ 5. Appendix K to Part 50 is revised to read as follows:

Appendix K to Part 50—Interpretation of the National Ambient Air Quality Standards for Particulate Matter

1.0 General

(a) This appendix explains the computations necessary for analyzing particulate matter data to determine attainment of the 24-hour standards specified in 40 CFR 50.6. For the primary and secondary standards, particulate matter is measured in the ambient air as PM_{10} (particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers) by a reference method based on appendix J of this part and designated in accordance with part 53 of this chapter, or by an equivalent method designated in accordance with part 53 of this chapter. The required frequency of measurements is specified in part 58 of this chapter.

(b) The terms used in this appendix are defined as follows:

Average refers to the arithmetic mean of the estimated number of exceedances per year, as per Section 3.1.

Daily value for PM_{10} refers to the 24-hour average concentration of PM_{10} calculated or measured from midnight to midnight (local time).

Exceedance means a daily value that is above the level of the 24-hour standard after rounding to the nearest 10 $\mu g/m^3$ (*i.e.*, values ending in 5 or greater are to be rounded up).

Expected annual value is the number approached when the annual values from an increasing number of years are averaged, in the absence of long-term trends in emissions or meteorological conditions.

Year refers to a calendar year.

(c) Although the discussion in this appendix focuses on monitored data, the same principles apply to modeling data, subject to EPA modeling guidelines.

2.0 Attainment Determinations

2.1 24-Hour Primary and Secondary Standards

(a) Under 40 CFR 50.6(a) the 24-hour primary and secondary standards are attained when the expected number of exceedances per year at each monitoring site is less than or equal to one. In the simplest case, the number of expected exceedances at a site is determined by recording the number of exceedances in each calendar year and then averaging them over the past 3 calendar years. Situations in which 3 years of data are not available and possible adjustments for unusual events or trends are discussed in sections 2.3 and 2.4 of this appendix. Further, when data for a year are incomplete, it is necessary to compute an estimated number of exceedances for that year by adjusting the observed number of exceedances. This procedure, performed by calendar quarter, is described in section 3.0 of this appendix. The expected number of exceedances is then estimated by averaging the individual annual estimates for the past 3 years.

(b) The comparison with the allowable expected exceedance rate of one per year is made in terms of a number rounded to the nearest tenth (fractional values equal to or greater than 0.05 are to be rounded up; *e.g.*, an exceedance rate of 1.05 would be rounded to 1.1, which is the lowest rate for nonattainment).

2.2 Reserved

2.3 Data Requirements

(a) 40 CFR 58.12 specifies the required minimum frequency of sampling for PM_{10}. For the purposes of making comparisons with the particulate matter standards, all data produced by State and Local Air Monitoring Stations (SLAMS) and other sites submitted to EPA in accordance with the part 58 requirements must be used, and a minimum of 75 percent of the scheduled PM_{10} samples per quarter are required.

(b) To demonstrate attainment of the 24-hour standards at a monitoring site, the monitor must provide sufficient data to perform the required calculations of sections 3.0 and 4.0 of this appendix. The amount of data required varies with the sampling frequency, data capture rate and the number of years of record. In all cases, 3 years of representative monitoring data that meet the 75 percent criterion of the previous paragraph should be utilized, if available,

and would suffice. More than 3 years may be considered, if all additional representative years of data meeting the 75 percent criterion are utilized. Data not meeting these criteria may also suffice to show attainment; however, such exceptions will have to be approved by the appropriate Regional Administrator in accordance with EPA guidance.

(c) There are less stringent data requirements for showing that a monitor has failed an attainment test and thus has recorded a violation of the particulate matter standards. Although it is generally necessary to meet the minimum 75 percent data capture requirement per quarter to use the computational equations described in section 3.0 of this appendix, this criterion does not apply when less data is sufficient to unambiguously establish nonattainment. The following examples illustrate how nonattainment can be demonstrated when a site fails to meet the completeness criteria. Nonattainment of the 24-hour primary standards can be established by the observed annual number of exceedances (*e.g.*, four observed exceedances in a single year), or by the estimated number of exceedances derived from the observed number of exceedances and the required number of scheduled samples (e.g., two observed exceedances with every other day sampling). In both cases, expected annual values must exceed the levels allowed by the standards.

2.4 Adjustment for Exceptional Events and Trends

(a) An exceptional event is an uncontrollable event caused by natural sources of particulate matter or an event that is not expected to recur at a given location. Inclusion of such a value in the computation of exceedances or averages could result in inappropriate estimates of their respective expected annual values. To reduce the effect of unusual events, more than 3 years of representative data may be used. Alternatively, other techniques, such as the use of statistical models or the use of historical data could be considered so that the event may be discounted or weighted according to the likelihood that it will recur. The use of such techniques is subject to the approval of the appropriate Regional Administrator in accordance with EPA guidance.

(b) In cases where long-term trends in emissions and air quality are evident, mathematical techniques should be applied to account for the trends to ensure that the expected annual values are not inappropriately biased by unrepresentative data. In the simplest case, if 3 years of data are available under stable emission conditions, this data should be used. In the event of a trend or shift in emission patterns, either the most recent representative year(s) could be used or statistical techniques or models could be used in conjunction with previous years of data to adjust for trends. The use of less than 3 years of data, and any adjustments are subject to the approval of the appropriate Regional Administrator in accordance with EPA guidance.

3.0 Computational Equations for the 24-Hour Standards

3.1 Estimating Exceedances for a Year

(a) If PM_{10} sampling is scheduled less frequently than every day, or if some scheduled samples are missed, a PM_{10} value will not be available for each day of the year. To account for the possible effect of incomplete data, an adjustment must be made to the data collected at each monitoring location to estimate the number of exceedances in a calendar year. In this adjustment, the assumption is made that the fraction of missing values that would have exceeded the standard level is identical to the fraction of measured values above this level. This computation is to be made for all sites that are scheduled to monitor throughout the entire year and meet the minimum data requirements of section 2.3 of this appendix. Because of possible seasonal imbalance, this adjustment shall be applied on a quarterly basis. The estimate of the expected number of exceedances for the quarter is equal to the observed number of exceedances plus an increment associated with the missing data. The following equation must be used for these computations:

Equation 1

$$e_q = v_q \times \left(\frac{N_q}{n_q} \right)$$

Where:

e_q = the estimated number of exceedances for calendar quarter q;

v_q = the observed number of exceedances for calendar quarter q;

N_q = the number of days in calendar quarter q;

n_q = the number of days in calendar quarter q with PM_{10} data; and

q = the index for calendar quarter, q = 1, 2, 3 or 4.

(b) The estimated number of exceedances for a calendar quarter must be rounded to the nearest hundredth (fractions) values equal to or greater than 0.005 must be rounded up).

(c) The estimated number of exceedances for the year, e, is the sum of the estimates for each calendar quarter.

Equation 2

$$e = \sum_{q=1}^{4} e_q$$

(d) The estimated number of exceedances for a single year must be rounded to one decimal place (fractional values equal to or greater than 0.05 are to be rounded up). The expected number of exceedances is then estimated by averaging the individual annual estimates for the most recent 3 or more representative years of data. The expected number of exceedances must be rounded to one decimal place (fractional values equal to or greater than 0.05 are to be rounded up).

(e) The adjustment for incomplete data will not be necessary for monitoring or modeling data which constitutes a complete record, i.e., 365 days per year.

(f) To reduce the potential for overestimating the number of expected exceedances, the correction for missing data will not be required for a calendar quarter in which the first observed exceedance has occurred if:

(1) There was only one exceedance in the calendar quarter;

(2) Everyday sampling is subsequently initiated and maintained for 4 calendar quarters in accordance with 40 CFR 58.12; and

(3) Data capture of 75 percent is achieved during the required period of everyday sampling. In addition, if the first exceedance is observed in a calendar quarter in which the monitor is already sampling every day, no adjustment for missing data will be made to the first exceedance if a 75 percent data capture rate was achieved in the quarter in which it was observed.

Example 1

a. During a particular calendar quarter, 39 out of a possible 92 samples were recorded, with one observed exceedance of the 24-hour standard. Using Equation 1, the estimated number of exceedances for the quarter is:

$e_q = 1 \times 92/39 = 2.359$ or 2.36.

b. If the estimated exceedances for the other 3 calendar quarters in the year were 2.30, 0.0 and 0.0, then, using Equation 2, the estimated number of exceedances for the year is 2.36 + 2.30 + 0.0 + 0.0 which equals 4.66 or 4.7. If no exceedances were observed for the 2 previous years, then the expected number of exceedances is estimated by: (⅓) × (4.7 + 0 + 0) = 1.57 or 1.6. Since 1.6 exceeds the allowable number of expected exceedances, this monitoring site would fail the attainment test.

Example 2

In this example, everyday sampling was initiated following the first observed exceedance as required by 40 CFR 58.12. Accordingly, the first observed exceedance would not be adjusted for incomplete sampling. During the next three quarters, 1.2 exceedances were estimated. In this case, the estimated exceedances for the year would be 1.0 + 1.2 + 0.0 + 0.0 which equals 2.2. If, as before, no exceedances were observed for the two previous years, then the estimated exceedances for the 3-year period would then be (⅓) × (2.2 + 0.0 + 0.0) = 0.7, and the monitoring site would not fail the attainment test.

3.2 Adjustments for Non-Scheduled Sampling Days

(a) If a systematic sampling schedule is used and sampling is performed on days in addition to the days specified by the systematic sampling schedule, e.g., during episodes of high pollution, then an adjustment must be made in the equation for the estimation of exceedances. Such an adjustment is needed to eliminate the bias in the estimate of the quarterly and annual number of exceedances that would occur if the chance of an exceedance is different for scheduled than for non-scheduled days, as would be the case with episode sampling.

(b) The required adjustment treats the systematic sampling schedule as a stratified sampling plan. If the period from one

scheduled sample until the day preceding the next scheduled sample is defined as a sampling stratum, then there is one stratum for each scheduled sampling day. An average number of observed exceedances is computed for each of these sampling strata. With nonscheduled sampling days, the estimated number of exceedances is defined as:

Equation 3

$$e_q = \left(\frac{N_q}{m_q}\right) \times \sum_{j=1}^{m_q} \left(\frac{v_j}{k_j}\right)$$

Where:

e_q = the estimated number of exceedances for the quarter;
N_q = the number of days in the quarter;
m_q = the number of strata with samples during the quarter;
v_j = the number of observed exceedances in stratum j; and
k_j = the number of actual samples in stratum j.

(c) Note that if only one sample value is recorded in each stratum, then Equation 3 reduces to Equation 1.

Example 3

A monitoring site samples according to a systematic sampling schedule of one sample every 6 days, for a total of 15 scheduled samples in a quarter out of a total of 92 possible samples. During one 6-day period, potential episode levels of PM_{10} were suspected, so 5 additional samples were taken. One of the regular scheduled samples was missed, so a total of 19 samples in 14 sampling strata were measured. The one 6-day sampling stratum with 6 samples recorded 2 exceedances. The remainder of the quarter with one sample per stratum recorded zero exceedances. Using Equation 3, the estimated number of exceedances for the quarter is:

$Eq = (92/14) \times (2/6 + 0 + \ldots + 0) = 2.19.$

■ 6. Appendix L to part 50 is amended by:
■ a. Revising section 1.1;
■ b. Revising the heading of section 7.3.4 and adding introductory text;
■ c. Revising paragraph (a) of section 7.3.4.3;
■ d. Adding section 7.3.4.4;
■ e. Revising Table L–1 in section 7.4.19;
■ f. Revising section 8.3.6;
■ g. Revising the first sentence in section 10.10 and revising section 10.13; and
■ h. Revising reference 2 in section 13.0 to read as follows:

Appendix L to Part 50—Reference Method for the Determination of Fine Particulate Matter as $PM_{2.5}$ in the Atmosphere

1.0 Applicability.

1.1 This method provides for the measurement of the mass concentration of fine particulate matter having an aerodynamic diameter less than or equal to a nominal 2.5 micrometers ($PM_{2.5}$) in ambient air over a 24-hour period for purposes of determining whether the primary and secondary national ambient air quality standards for fine particulate matter specified in § 50.7 and § 50.13 of this part are met. The measurement process is considered to be nondestructive, and the $PM_{2.5}$ sample obtained can be subjected to subsequent physical or chemical analyses. Quality assessment procedures are provided in part 58, appendix A of this chapter, and quality assurance guidance are provided in references 1, 2, and 3 in section 13.0 of this appendix.

* * * * *

7.3.4 *Particle size separator.* The sampler shall be configured with either one of the two alternative particle size separators described in this section 7.3.4. One separator is an impactor-type separator (WINS impactor) described in sections 7.3.4.1, 7.3.4.2, and 7.3.4.3 of this appendix. The alternative separator is a cyclone-type separator (VSCC™) described in section 7.3.4.4 of this appendix.

* * * * *

7.3.4.3 * * *

(a) Composition. Dioctyl sebacate (DOS), single-compound diffusion oil.

* * * * *

7.3.4.4 The cyclone-type separator is identified as a BGI VSCC™ 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.

* * * * *

7.4.19 * * *

TABLE L–1 TO APPENDIX L OF PART 50.—SUMMARY OF INFORMATION TO BE PROVIDED BY THE SAMPLER

Information to be provided	Appendix L section reference	Availability			Format		
		Anytime [1]	End of period [2]	Visual display [3]	Data output [4]	Digital reading [5]	Units
Flow rate, 30-second maximum interval	7.4.5.1	✓		✓	*	XX.X	L/min
Flow rate, average for the sample period	7.4.5.2	*	✓	*	✓	XX.X	L/min
Flow rate, CV, for sample period	7.4.5.2	*	✓	*	✓	XX.X	%
Flow rate, 5-min. average out of spec. (FLAG [6])	7.4.5.2	✓	✓	✓	✓■	On/Off	
Sample volume, total	7.4.5.2	*	✓	✓	✓	XX.X	m^3
Temperature, ambient, 30-second interval	7.4.8	✓		✓		XX.X	°C
Temperature, ambient, min., max., average for the sample period	7.4.8	*	✓	✓	(■	XX.X	°C
Baro. pressure, ambient, 30-second interval	7.4.9	✓		✓		XXX	mm Hg
Baro. pressure, ambient, min., max., average for the sample period	7.4.9	*	✓	✓	✓■	XXX	mm Hg
Filter temperature, 30-second interval	7.4.11	✓		✓		XX.X	°C
Filter temp. differential, 30-second interval, out of spec. (FLAG [6])	7.4.11	*	✓	✓	✓■	On/Off	
Filter temp., maximum differential from ambient, date, time of occurrence	7.4.11	*	*	*	*	X.X, YY/MM/DD HH.mm,	°C, Yr/Mon/Day Hrs. min
Date and Time	7.4.12	✓		✓		YY/MM/DD HH.mm.	Yr/Mon/Day Hrs. min
Sample start and stop time settings	7.4.12	✓	✓	✓	✓	YY/MM/DD HH.mm.	Yr/Mon/Day Hrs. min
Sample period start time	7.4.12		✓	✓	✓	YY/MM/DD HH.mm.	Yr/Mon/Day Hrs. min

TABLE L–1 TO APPENDIX L OF PART 50.—SUMMARY OF INFORMATION TO BE PROVIDED BY THE SAMPLER—Continued

Information to be provided	Appendix L section reference	Availability			Format		
		Anytime[1]	End of period[2]	Visual display[3]	Data output[4]	Digital reading[5]	Units
Elapsed sample time	7.4.13	*	✓	✓	✓	HH.mm	Hrs. min
Elapsed sample time, out of spec. (FLAG[6])	7.4.13		✓	✓	✓■	On/Off	
Power interruptions ≤1 min., start time of first 10	7.4.15.5	*	✓	*	✓	1HH.mm, 2HH.mm, etc.,	Hrs. min
User-entered information, such as sampler and site identification	7.4.16	✓	✓	✓	✓■	As entered.	

✓ Provision of this information is required.
* Provision of this information is optional. If information related to the entire sample period is optionally provided prior to the end of the sample period, the value provided should be the value calculated for the portion of the sampler period completed up to the time the information is provided.
■ Indicates that this information is also required to be provided to the Air Quality System (AQS) data bank; see §58.16 of this chapter. For ambient temperature and barometric pressure, only the average for the sample period must be reported.
1. Information is required to be available to the operator at any time the sampler is operating, whether sampling or not.
2. Information relates to the entire sampler period and must be provided following the end of the sample period until reset manually by the operator or automatically by the sampler upon the start of a new sample period.
3. Information shall be available to the operator visually.
4. Information is to be available as digital data at the sampler's data output port specified in section 7.4.16 of this appendix following the end of the sample period until reset manually by the operator or automatically by the sampler upon the start of a new sample period.
5. Digital readings, both visual and data output, shall have not less than the number of significant digits and resolution specified.
6. Flag warnings may be displayed to the operator by a single flag indicator or each flag may be displayed individually. Only a set (on) flag warning must be indicated; an off (unset) flag may be indicated by the absence of a flag warning. Sampler users should refer to section 10.12 of this appendix regarding the validity of samples for which the sampler provided an associated flag warning.

* * * * *

8.3.6 The post-sampling conditioning and weighing shall be completed within 240 hours (10 days) after the end of the sample period, unless the filter sample is maintained at temperatures below the average ambient temperature during sampling (or 4 °C or below for average sampling temperatures less than 4 °C) during the time between retrieval from the sampler and the start of the conditioning, in which case the period shall not exceed 30 days. Reference 2 in section 13.0 of this appendix has additional guidance on transport of cooled filters.

* * * * *

10.10 Within 177 hours (7 days, 9 hours) of the end of the sample collection period, the filter, while still contained in the filter cassette, shall be carefully removed from the sampler, following the procedure provided in the sampler operation or instruction manual and the quality assurance program, and placed in a protective container. * * *

* * * * *

10.13 After retrieval from the sampler, the exposed filter containing the $PM_{2.5}$ sample should be transported to the filter conditioning environment as soon as possible, ideally to arrive at the conditioning environment within 24 hours for conditioning and subsequent weighing. During the period between filter retrieval from the sampler and the start of the conditioning, the filter shall be maintained as cool as practical and continuously protected from exposure to temperatures over 25 °C to protect the integrity of the sample and minimize loss of volatile components during transport and storage. See section 8.3.6 of this appendix regarding time limits for completing the post-sampling weighing. See reference 2 in section 13.0 of this appendix for additional guidance on transporting filter samplers to the conditioning and weighing laboratory.

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13.0 References

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2. Quality Assurance Guidance Document 2.12. Monitoring $PM_{2.5}$ in Ambient Air Using Designated Reference or Class I Equivalent Methods. U.S. EPA, National Exposure Research Laboratory, Research Triangle Park, NC, November 1988 or later edition. Currently available at: *http://www.epa.gov/ttn/amtic/pmqainf.html*.

* * * * *

■ 7. Appendix N to part 50 is revised to read as follows:

Appendix N to Part 50—Interpretation of the National Ambient Air Quality Standards for $PM_{2.5}$

1. General

(a) This appendix explains the data handling conventions and computations necessary for determining when the annual and 24-hour primary and secondary national ambient air quality standards (NAAQS) for $PM_{2.5}$ specified in §50.7 and §50.13 of this part are met. $PM_{2.5}$, defined as particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers, is measured in the ambient air by a Federal reference method (FRM) based on appendix L of this part, as applicable, and designated in accordance with part 53 of this chapter, or by a Federal equivalent method (FEM) designated in accordance with part 53 of this chapter, or by an Approved Regional Method (ARM) designated in accordance with part 58 of this chapter. Data handling and computation procedures to be used in making comparisons between reported $PM_{2.5}$ concentrations and the levels of the $PM_{2.5}$ NAAQS are specified in the following sections.

(b) Data resulting from exceptional events, for example structural fires or high winds, may be given special consideration. In some cases, it may be appropriate to exclude these data in whole or part because they could result in inappropriate values to compare with the levels of the $PM_{2.5}$ NAAQS. In other cases, it may be more appropriate to retain the data for comparison with the levels of the $PM_{2.5}$ NAAQS and then for EPA to formulate the appropriate regulatory response.

(c) The terms used in this appendix are defined as follows:

Annual mean refers to a weighted arithmetic mean, based on quarterly means, as defined in section 4.4 of this appendix.

Creditable samples are samples that are given credit for data completeness. They include valid samples collected on required sampling days and valid "make-up" samples taken for missed or invalidated samples on required sampling days.

Daily values for $PM_{2.5}$ refers to the 24-hour average concentrations of $PM_{2.5}$ calculated (averaged from hourly measurements) or measured from midnight to midnight (local standard time) that are used in NAAQS computations.

Designated monitors are those monitoring sites designated in a State or local agency PM Monitoring Network Description in accordance with part 58 of this chapter.

Design values are the metrics (i.e., statistics) that are compared to the NAAQS levels to determine compliance, calculated as shown in section 4 of this appendix.

(1) The 3-year average of annual means for a single monitoring site or a group of monitoring sites (referred to as the "*annual standard design value*"). If spatial averaging

has been approved by EPA for a group of sites which meet the criteria specified in section 2(b) of this appendix and section 4.7.5 of appendix D of 40 CFR part 58, then 3 years of spatially averaged annual means will be averaged to derive the *annual standard design value* for that group of sites (further referred to as the "*spatially averaged annual standard design value*"). Otherwise, the annual standard design value will represent the 3-year average of annual means for a single site (further referred to as the "*single site annual standard design value*").

(2) The 3-year average of annual 98th percentile 24-hour average values recorded at each monitoring site (referred to as the "*24-hour standard design value*").

Extra samples are non-creditable samples. They are daily values that do not occur on scheduled sampling days and that can not be used as make-ups for missed or invalidated scheduled samples. Extra samples are used in mean calculations and are subject to selection as a 98th percentile.

Make-up samples are samples taken to supplant missed or invalidated required scheduled samples. Make-ups can be made by either the primary or the collocated instruments. Make-up samples are either taken before the next required sampling day or exactly one week after the missed (or voided) sampling day. Also, to be considered a valid make-up, the sampling must be administered according to EPA guidance.

98th percentile is the daily value out of a year of $PM_{2.5}$ monitoring data below which 98 percent of all daily values fall.

Year refers to a calendar year.

2.0 Monitoring Considerations.

(a) Section 58.30 of this chapter specifies which monitoring locations are eligible for making comparisons with the $PM_{2.5}$ standards.

(b) To qualify for spatial averaging, monitoring sites must meet the criterion specified in section 4.7.5 of appendix D of 40 CFR part 58 as well as the following requirements:

(1) The annual mean concentration at each site shall be within 10 percent of the spatially averaged annual mean.

(2) The daily values for each site pair among the 3-year period shall yield a correlation coefficient of at least 0.9 for each calendar quarter.

(3) All of the monitoring sites should principally be affected by the same major emission sources of $PM_{2.5}$. For example, this could be demonstrated by site-specific chemical speciation profiles confirming all major component concentration averages to be within 10 percent for each calendar quarter.

(4) The requirements in paragraphs (b)(1) through (3) of this section shall be met for 3 consecutive years in order to produce a valid spatially averaged annual standard design value. Otherwise, the individual (single) site annual standard design values shall be compared directly to the level of the annual NAAQS.

(c) Section 58.12 of this chapter specifies the required minimum frequency of sampling for $PM_{2.5}$. Exceptions to the specified sampling frequencies, such as a reduced frequency during a season of expected low concentrations (i.e., "seasonal sampling"), are subject to the approval of EPA. Annual 98th percentile values are to be calculated according to equation 6 in section 4.5 of this appendix when a site operates on a "seasonal sampling" schedule.

3.0 Requirements for Data Used for Comparisons With the $PM_{2.5}$ NAAQS and Data Reporting Considerations.

(a) Except as otherwise provided in this appendix, only valid FRM/FEM/ARM $PM_{2.5}$ data required to be submitted to EPA's Air Quality System (AQS) shall be used in the design value calculations.

(b) $PM_{2.5}$ measurement data (typically hourly for continuous instruments and daily for filter-based instruments) shall be reported to AQS in micrograms per cubic meter ($\mu g/m^3$) to one decimal place, with additional digits to the right being truncated.

(c) Block 24-hour averages shall be computed from available hourly $PM_{2.5}$ concentration data for each corresponding day of the year and the result shall be stored in the first, or start, hour (i.e., midnight, hour '0') of the 24-hour period. A 24-hour average shall be considered valid if at least 75 percent (i.e., 18) of the hourly averages for the 24-hour period are available. In the event that less than all 24 hourly averages are available (i.e., less than 24, but at least 18), the 24-hour average shall be computed on the basis of the hours available using the number of available hours as the divisor (e.g., 19). 24-hour periods with seven or more missing hours shall be considered valid if, after substituting zero for all missing hourly concentrations, the 24-hour average concentration is greater than the level of the standard. The computed 24-hour average $PM_{2.5}$ concentrations shall be reported to one decimal place (the additional digits to the right of the first decimal place are truncated, consistent with the data handling procedures for the reported data).

(d) Except for calculation of spatially averaged annual means and spatially averaged annual standard design values, all other calculations shown in this appendix shall be implemented on a site-level basis. Site level data shall be processed as follows:

(1) The default dataset for a site shall consist of the measured concentrations recorded from the designated primary FRM/FEM/ARM monitor. The primary monitor shall be designated in the appropriate State or local agency PM Monitoring Network Description. All daily values produced by the primary sampler are considered part of the site record (i.e., that site's daily value); this includes all creditable samples and all extra samples.

(2) Data for the primary monitor shall be augmented as much as possible with data from collocated FRM/FEM/ARM monitors. If a valid 24-hour measurement is not produced from the primary monitor for a particular day (scheduled or otherwise), but a valid sample is generated by a collocated FRM/FEM/ARM instrument (and recorded in AQS), then that collocated value shall be considered part of the site data record (i.e., that site's daily value). If more than one valid collocated FRM/FEM/ARM value is available, the average of those valid collocated values shall be used as the daily value.

(c) All daily values in the composite site record are used in annual mean and 98th percentile calculations, however, not all daily values are give credit towards data completeness requirements. Only "creditable" samples are given credit for data completeness. Creditable samples include valid samples on scheduled sampling days and valid make-up samples. All other types of daily values are referred to as "extra" samples.

4.0 Comparisons With the $PM_{2.5}$ NAAQS.

4.1 Annual $PM_{2.5}$ NAAQS.

(a) The annual $PM_{2.5}$ NAAQS is met when the annual standard design value is less than or equal to 15.0 micrograms per cubic meter ($\mu g/m^3$).

(b) For single site comparisons, 3 years of valid annual means are required to produce a valid annual standard design value. In the case of spatial averaging, 3 years of valid spatially averaged annual means are required to produce a valid annual standard design value. Designated sites with less than 3 years of data shall be included in annual spatial averages for those years that data completeness requirements are met. A year meets data completeness requirements when at least 75 percent of the scheduled sampling days for each quarter have valid data. [Quarterly data capture rates (expressed as a percentage) are specifically calculated as the number of creditable samples for the quarter divided by the number of scheduled samples for the quarter, the result then multiplied by 100 and rounded to the nearest integer.] However, years with at least 11 samples in each quarter shall be considered valid, notwithstanding quarters with less than complete data, if the resulting annual mean, spatially averaged annual mean concentration, or resulting annual standard design value concentration (rounded according to the conventions of section 4.3 of this appendix) is greater than the level of the standard. Furthermore, where the explicit 11 sample per quarter requirement is not met, the site annual mean shall still be considered valid if, by substituting a low value (described below) for the missing data in the deficient quarters (substituting enough to meet the 11 sample minimum), the computation still yields a recalculated annual mean, spatially averaged annual mean concentration, or annual standard design value concentration over the level of the standard. The low value used for this substitution test shall be the lowest reported daily value in the site data record for that calendar quarter over the most recent 3-year period. If an annual mean is deemed complete using this test, the original annual mean (without substituted low values) shall be considered the official mean value for this site, not the result of the recalculated test using the low values.

(c) The use of less than complete data is subject to the approval of EPA, which may consider factors such as monitoring site closures/moves, monitoring diligence, and nearby concentrations in determining whether to use such data.

(d) The equations for calculating the annual standard design values are given in section 4.4 of this appendix.

4.2 24-Hour $PM_{2.5}$ NAAQS.

(a) The 24-hour $PM_{2.5}$ NAAQS is met when the 24-hour standard design value at each monitoring site is less than or equal to 35 μg/m³. This comparison shall be based on 3 consecutive, complete years of air quality data. A year meets data completeness requirements when at least 75 percent of the scheduled sampling days for each quarter have valid data. However, years shall be considered valid, notwithstanding quarters with less than complete data (even quarters with less than 11 samples), if the resulting annual 98th percentile value or resulting 24-hour standard design value (rounded according to the conventions of section 4.3 of this appendix) is greater than the level of the standard.

(b) The use of less than complete data is subject to the approval of EPA which may consider factors such as monitoring site closures/moves, monitoring diligence, and nearby concentrations in determining whether to use such data for comparisons to the NAAQS.

(c) The equations for calculating the 24-hour standard design values are given in section 4.5 of this appendix.

4.3 *Rounding Conventions.* For the purposes of comparing calculated values to the applicable level of the standard, it is necessary to round the final results of the calculations described in sections 4.4 and 4.5 of this appendix. Results for all intermediate calculations shall not be rounded.

(a) Annual $PM_{2.5}$ standard design values shall be rounded to the nearest 0.1 μg/m³ (decimals 0.05 and greater are rounded up to the next 0.1, and any decimal lower than 0.05 is rounded down to the nearest 0.1).

(b) 24-hour $PM_{2.5}$ standard design values shall be rounded to the nearest 1 μg/m³ (decimals 0.5 and greater are rounded up to the nearest whole number, and any decimal lower than 0.5 is rounded down to the nearest whole number).

4.4 Equations for the Annual $PM_{2.5}$ NAAQS.

(a) An annual mean value for $PM_{2.5}$ is determined by first averaging the daily values of a calendar quarter using equation 1 of this appendix:

Equation 1

$$\bar{X}_{q,y,s} = \frac{1}{n_q}\sum_{i=1}^{n_q} X_{i,q,y,s}$$

Where:

$\bar{X}_{q,y,s}$ = the mean for quarter q of the year y for site s;

n_q = the number of daily values in the quarter; and

$x_{i,q,y,s}$ = the i^{th} value in quarter q for year y for site s.

(b) Equation 2 of this appendix is then used to calculate the site annual mean:

Equation 2

$$\bar{X}_{y,s} = \frac{1}{4}\sum_{q=1}^{4} \bar{X}_{q,y,s}$$

Where:

$\bar{X}_{y,s}$ = the annual mean concentration for year y (y = 1, 2, or 3) and for site s; and

$\bar{X}_{q,y,s}$ = the mean for quarter q of year y for site s.

(c) If spatial averaging is utilized, the site-based annual means will then be averaged together to derive the spatially averaged annual mean using equation 3 of this appendix. Otherwise (i.e., for single site comparisons), skip to equation 4.B of this appendix.

Equation 3

$$\bar{x}_y = \frac{1}{n_s}\sum_{s=1}^{n_s} \bar{x}_{y,s}$$

Where:

$\bar{x}_y$ = the spatially averaged mean for year y,

$\bar{x}_{y,s}$ = the annual mean for year y and site s for sites designated to be averaged that meet completeness criteria , and

n_s = the number of sites designated to be averaged that meet completeness criteria.

(d) The annual standard design value is calculated using equation 4A of this appendix when spatial averaging and equation 4B of this appendix when not spatial averaging:

Equation 4A

When spatial averaging

$$\bar{x} = \frac{1}{3}\sum_{y=1}^{3} \bar{x}_y$$

Equation 4B

When not spatial averaging

$$\bar{x} = \frac{1}{3}\sum_{y=1}^{3} \bar{x}_{y,s}$$

Where:

$\bar{x}$ = the annual standard design value (the spatially averaged annual standard design value for equation 4A of this appendix and the single site annual standard design value for equation 4B of this appendix); and

$\bar{x}_y$ = the spatially averaged annual mean for year y (result of equation 3 of this appendix) when spatial averaging is used, or

$\bar{x}_{y,s}$ the annual mean for year y and site s (result of equation 2 of this appendix) when spatial averaging is not used.

(e) The annual standard design value is rounded according to the conventions in section 4.3 of this appendix before a comparison with the standard is made.

4.5 Equations for the 24-Hour $PM_{2.5}$ NAAQS

(a) When the data for a particular site and year meet the data completeness requirements in section 4.2 of this appendix, calculation of the 98th percentile is accomplished by the steps provided in this subsection. Equation 5 of this appendix shall be used to compute annual 98th percentile values, except that where a site operates on an approved seasonal sampling schedule, equation 6 of this appendix shall be used instead.

(1) *Regular formula for computing annual 98th percentile values.* Calculation of annual 98th percentile values using the regular formula (equation 5) will be based on the creditable number of samples (as described below), rather than on the actual number of samples. Credit will not be granted for extra (non-creditable) samples. Extra samples, however, are candidates for selection as the annual 98th percentile. [The creditable number of samples will determine how deep to go into the data distribution, but all samples (creditable and extra) will be considered when making the percentile assignment.] The annual creditable number of samples is the sum of the four quarterly creditable number of samples. Sort all the daily values from a particular site and year by ascending value. (For example: [x[1], x[2], x[3], * * *, x[n]]. In this case, x[1] is the smallest number and x[n] is the largest value.) The 98th percentile is determined from this sorted series of daily values which is ordered from the lowest to the highest number. Compute (0.98) x (cn) as the number "i.d," where "cn" is the annual creditable number of samples, "i" is the integer part of the result, and "d" is the decimal part of the result. The 98th percentile value for year y, $P_{0.98,\,y}$, is calculated using equation 5 of this appendix:

Equation 5

$$P_{0.98,y} = X_{[i+1]}$$

Where:

$P_{0.98,\,y}$ = 98th percentile for year y;

$x_{[i+1]}$ = the $(i+1)^{th}$ number in the ordered series of numbers;

i = the integer part of the product of 0.98 and cn.

(2) Formula for computing annual 98th percentile values when sampling frequencies are seasonal. Calculate the annual 98th percentiles by determining the smallest measured concentration, x, that makes W(x) greater than 0.98 using equation 6 of this appendix:

Equation 6

$$W(x) = \frac{d_{High}}{d_{High} + d_{Low}} F_{High}(x) + \frac{d_{Low}}{d_{High} + d_{Low}} F_{Low}(x)$$

Where:

d_{High} = number of calendar days in the "High" season;

d_{Low} = number of calendar days in the "Low" season;

d_{Low}

d_{High}+ = days in a year; and

$$F_a(x) = \frac{\text{number of daily values in season a that are} \leq x}{\text{number of daily values in season a}}$$

Such that "a" can be either "High" or "Low"; "x" is the measured concentration; and "$d_{High}/(d_{High} + d_{Low})$ and $d_{Low}/(d_{High} + d_{Low})$" are constant and are called seasonal "weights."

(b) The 24-hour standard design value is then calculated by averaging the annual 98th percentiles using equation 7 of this appendix:

Equation 7

$$P_{0.98} = \frac{\sum_{y=1}^{3} P_{0.98,y}}{3}$$

(c) The 24-hour standard design value (3-year average 98th percentile) is rounded according to the conventions in section 4.3 of this appendix before a comparison with the standard is made.

■ 8. Appendix O is added to part 50 to read as follows:

Appendix O to Part 50—Reference Method for the Determination of Coarse Particulate Matter as $PM_{10-2.5}$ in the Atmosphere

1.0 Applicability and Definition

1.1 This method provides for the measurement of the mass concentration of coarse particulate matter ($PM_{10-2.5}$) in ambient air over a 24-hour period. In conjunction with additional analysis, this method may be used to develop speciated data.

1.2 For the purpose of this method, $PM_{10-2.5}$ is defined as particulate matter having an aerodynamic diameter in the nominal range of 2.5 to 10 micrometers, inclusive.

1.3 For this reference method, $PM_{10-2.5}$ concentrations shall be measured as the arithmetic difference between separate but concurrent, collocated measurements of PM_{10} and $PM_{2.5}$, where the PM_{10} measurements are obtained with a specially approved sampler, identified as a "PM_{10c} sampler," that meets more demanding performance requirements than conventional PM_{10} samplers described in appendix J of this part. Measurements obtained with a PM_{10c} sampler are identified as "PM_{10c} measurements" to distinguish them from conventional PM_{10} measurements obtained with conventional PM_{10} samplers. Thus, $PM_{10-2.5} = PM_{10c} - PM_{2.5}$.

1.4 The PM_{10c} and $PM_{2.5}$ gravimetric measurement processes are considered to be nondestructive, and the PM_{10c} and $PM_{2.5}$ samples obtained in the $PM_{10-2.5}$ measurement process can be subjected to subsequent physical or chemical analyses.

1.5 Quality assessment procedures are provided in part 58, appendix A of this chapter. The quality assurance procedures and guidance provided in reference 1 in section 13 of this appendix, although written specifically for $PM_{2.5}$, are generally applicable for PM_{10c}, and, hence, $PM_{10-2.5}$ measurements under this method, as well.

1.6 A method based on specific model PM_{10c} and $PM_{2.5}$ samplers will be considered a reference method for purposes of part 58 of this chapter only if:

(a) The PM_{10c} and $PM_{2.5}$ samplers and the associated operational procedures meet the requirements specified in this appendix and all applicable requirements in part 53 of this chapter, and

(b) The method based on the specific samplers and associated operational procedures have been designated as a reference method in accordance with part 53 of this chapter.

1.7 $PM_{10-2.5}$ methods based on samplers that meet nearly all specifications set forth in this method but have one or more significant but minor deviations or modifications from those specifications may be designated as "Class I" equivalent methods for $PM_{10-2.5}$ in accordance with part 53 of this chapter.

1.8 $PM_{2.5}$ measurements obtained incidental to the $PM_{10-2.5}$ measurements by this method shall be considered to have been obtained with a reference method for $PM_{2.5}$ in accordance with appendix L of this part.

1.9 PM_{10c} measurements obtained incidental to the $PM_{10-2.5}$ measurements by this method shall be considered to have been obtained with a reference method for PM_{10} in accordance with appendix J of this part, provided that:

(a) The PM_{10c} measurements are adjusted to EPA reference conditions (25 °C and 760 millimeters of mercury), and

(b) Such PM_{10c} measurements are appropriately identified to differentiate them from PM_{10} measurements obtained with other (conventional) methods for PM_{10} designated in accordance with part 53 of this chapter as reference or equivalent methods for PM_{10}.

2.0 Principle

2.1 Separate, collocated, electrically powered air samplers for PM_{10c} and $PM_{2.5}$ concurrently draw ambient air at identical, constant volumetric flow rates into specially shaped inlets and through one or more inertial particle size separators where the suspended particulate matter in the PM_{10} or $PM_{2.5}$ size range, as applicable, is separated for collection on a polytetrafluoroethylene (PTFE) filter over the specified sampling period. The air samplers and other aspects of this $PM_{10-2.5}$ reference method are specified either explicitly in this appendix or by reference to other applicable regulations or quality assurance guidance.

2.2 Each PM_{10c} and $PM_{2.5}$ sample collection filter is weighed (after moisture and temperature conditioning) before and after sample collection to determine the net weight (mass) gain due to collected PM_{10c} or $PM_{2.5}$. The total volume of air sampled by each sampler is determined by the sampler from the measured flow rate at local ambient temperature and pressure and the sampling time. The mass concentrations of both PM_{10c} and $PM_{2.5}$ in the ambient air are computed as the total mass of collected particles in the PM_{10} or $PM_{2.5}$ size range, as appropriate, divided by the total volume of air sampled by the respective samplers, and expressed in micrograms per cubic meter ($\mu g/m^3$) at local temperature and pressure conditions. The mass concentration of $PM_{10-2.5}$ is determined as the PM_{10c} concentration value less the corresponding, concurrently measured $PM_{2.5}$ concentration value.

2.3 Most requirements for $PM_{10-2.5}$ reference methods are similar or identical to the requirements for $PM_{2.5}$ reference methods as set forth in appendix L to this part. To insure uniformity, applicable appendix L requirements are incorporated herein by reference in the sections where indicated rather than repeated in this appendix.

3.0 $PM_{10-2.5}$ Measurement Range

3.1 *Lower concentration limit.* The lower detection limit of the mass concentration measurement range is estimated to be approximately 3 $\mu g/m^3$, based on the observed precision of $PM_{2.5}$ measurements in the national $PM_{2.5}$ monitoring network, the probable similar level of precision for the matched PM_{10c} measurements, and the additional variability arising from the differential nature of the measurement process. This value is provided merely as a guide to the significance of low $PM_{10-2.5}$ concentration measurements.

3.2 *Upper concentration limit.* The upper limit of the mass concentration range is determined principally by the PM_{10c} filter

mass loading beyond which the sampler can no longer maintain the operating flow rate within specified limits due to increased pressure drop across the loaded filter. This upper limit cannot be specified precisely because it is a complex function of the ambient particle size distribution and type, humidity, the individual filter used, the capacity of the sampler flow rate control system, and perhaps other factors. All PM_{10c} samplers are estimated to be capable of measuring 24-hour mass concentrations of at least 200 $\mu g/m^3$ while maintaining the operating flow rate within the specified limits. The upper limit for the $PM_{10-2.5}$ measurement is likely to be somewhat lower because the $PM_{10-2.5}$ concentration represents only a fraction of the PM_{10} concentration.

3.3 *Sample period.* The required sample period for $PM_{10-2.5}$ concentration measurements by this method shall be at least 1,380 minutes but not more than 1,500 minutes (23 to 25 hours), and the start times of the $PM_{2.5}$ and PM_{10c} samples are within 10 minutes and the stop times of the samples are also within 10 minutes (see section 10.4 of this appendix).

4.0 Accuracy (bias)

4.1 Because the size, density, and volatility of the particles making up ambient particulate matter vary over wide ranges and the mass concentration of particles varies with particle size, it is difficult to define the accuracy of $PM_{10-2.5}$ measurements in an absolute sense. Furthermore, generation of credible $PM_{10-2.5}$ concentration standards at field monitoring sites and presenting or introducing such standards reliably to samplers or monitors to assess accuracy is still generally impractical. The accuracy of $PM_{10-2.5}$ measurements is therefore defined in a relative sense as bias, referenced to measurements provided by other reference method samplers or based on flow rate verification audits or checks, or on other performance evaluation procedures.

4.2 Measurement system bias for monitoring data is assessed according to the procedures and schedule set forth in part 58, appendix A of this chapter. The goal for the measurement uncertainty (as bias) for monitoring data is defined in part 58, appendix A of this chapter as an upper 95 percent confidence limit for the absolute bias of 15 percent. Reference 1 in section 13 of this appendix provides additional information and guidance on flow rate accuracy audits and assessment of bias.

5.0 Precision

5.1 Tests to establish initial measurement precision for each sampler of the reference method sampler pair are specified as a part of the requirements for designation as a reference method under part 53 of this chapter.

5.2 Measurement system precision is assessed according to the procedures and schedule set forth in appendix A to part 58 of this chapter. The goal for acceptable measurement uncertainty, as precision, of monitoring data is defined in part 58, appendix A of this chapter as an upper 95 percent confidence limit for the coefficient of variation (CV) of 15 percent. Reference 1 in section 13 of this appendix provides additional information and guidance on this requirement.

6.0 *Filters for PM_{10c} and $PM_{2.5}$ Sample Collection.* Sample collection filters for both PM_{10c} and $PM_{2.5}$ measurements shall be identical and as specified in section 6 of appendix L to this part.

7.0 *Sampler.* The $PM_{10-2.5}$ sampler shall consist of a PM_{10c} sampler and a $PM_{2.5}$ sampler, as follows:

7.1 The $PM_{2.5}$ sampler shall be as specified in section 7 of appendix L to this part.

7.2 The PM_{10c} sampler shall be of like manufacturer, design, configuration, and fabrication to that of the $PM_{2.5}$ sampler and as specified in section 7 of appendix L to this part, except as follows:

7.2.1 The particle size separator specified in section 7.3.4 of appendix L to this part shall be eliminated and replaced by a downtube extension fabricated as specified in Figure O–1 of this appendix.

7.2.2 The sampler shall be identified as a PM_{10c} sampler on its identification label required under § 53.9(d) of this chapter.

7.2.3 The average temperature and average barometric pressure measured by the sampler during the sample period, as described in Table L–1 of appendix L to this part, need not be reported to EPA's AQS data base, as required by section 7.4.19 and Table L–1 of appendix L to this part, provided such measurements for the sample period determined by the associated $PM_{2.5}$ sampler are reported as required.

7.3 In addition to the operation/instruction manual required by section 7.4.18 of appendix L to this part for each sampler, supplemental operational instructions shall be provided for the simultaneous operation of the samplers as a pair to collect concurrent PM_{10c} and $PM_{2.5}$ samples. The supplemental instructions shall cover any special procedures or guidance for installation and setup of the samplers for $PM_{10-2.5}$ measurements, such as synchronization of the samplers' clocks or timers, proper programming for collection of concurrent samples, and any other pertinent issues related to the simultaneous, coordinated operation of the two samplers.

7.4 Capability for electrical interconnection of the samplers to simplify sample period programming and further ensure simultaneous operation is encouraged but not required. Any such capability for interconnection shall not supplant each sampler's capability to operate independently, as required by section 7 of appendix L of this part.

8.0 Filter Weighing

8.1 Conditioning and weighing for both PM_{10c} and $PM_{2.5}$ sample filters shall be as specified in section 8 of appendix L to this part. See reference 1 of section 13 of this appendix for additional, more detailed guidance.

8.2 Handling, conditioning, and weighing for both PM_{10c} and $PM_{2.5}$ sample filters shall be matched such that the corresponding PM_{10c} and $PM_{2.5}$ filters of each filter pair receive uniform treatment. The PM_{10c} and $PM_{2.5}$ sample filters should be weighed on the same balance, preferably in the same weighing session and by the same analyst.

8.3 Due care shall be exercised to accurately maintain the paired relationship of each set of concurrently collected PM_{10c} and $PM_{2.5}$ sample filters and their net weight gain data and to avoid misidentification or reversal of the filter samples or weight data. See Reference 1 of section 13 of this appendix for additional guidance.

9.0 *Calibration.* Calibration of the flow rate, temperature measurement, and pressure measurement systems for both the PM_{10c} and $PM_{2.5}$ samplers shall be as specified in section 9 of appendix L to this part.

10.0 $PM_{10-2.5}$ Measurement Procedure

10.1 The PM_{10c} and $PM_{2.5}$ samplers shall be installed at the monitoring site such that their ambient air inlets differ in vertical height by not more than 0.2 meter, if possible, but in any case not more than 1 meter, and the vertical axes of their inlets are separated by at least 1 meter but not more than 4 meters, horizontally.

10.2 The measurement procedure for PM_{10c} shall be as specified in section 10 of appendix L to this part, with "PM_{10c}" substituted for "$PM_{2.5}$" wherever it occurs in that section.

10.3 The measurement procedure for $PM_{2.5}$ shall be as specified in section 10 of appendix L to this part.

10.4 For the $PM_{10-2.5}$ measurement, the PM_{10c} and $PM_{2.5}$ samplers shall be programmed to operate on the same schedule and such that the sample period start times are within 5 minutes and the sample duration times are within 5 minutes.

10.5 Retrieval, transport, and storage of each PM_{10c} and $PM_{2.5}$ sample pair following sample collection shall be matched to the extent practical such that both samples experience uniform conditions.

11.0 *Sampler Maintenance.* Both PM_{10c} and $PM_{2.5}$ samplers shall be maintained as described in section 11 of appendix L to this part.

12.0 Calculations

12.1 Both concurrent PM_{10c} and $PM_{2.5}$ measurements must be available, valid, and meet the conditions of section 10.4 of this appendix to determine the $PM_{10-2.5}$ mass concentration.

12.2 The PM_{10c} mass concentration is calculated using equation 1 of this section:

Equation 1

$$PM_{10c} = \frac{(W_f - W_i)}{V_a}$$

Where:

PM_{10c} = mass concentration of PM_{10c}, $\mu g/m^3$;

W_f, W_i = final and initial masses (weights), respectively, of the filter used to collect the PM_{10c} particle sample, μg;

V_a = total air volume sampled by the PM_{10c} sampler in actual volume units measured at local conditions of temperature and pressure, as provided by the sampler, m^3.

Note: Total sample time must be between 1,380 and 1,500 minutes (23 and 25 hrs) for a fully valid PM_{10c} sample; however, see also section 3.3 of this appendix.

12.3 The $PM_{2.5}$ mass concentration is calculated as specified in section 12 of appendix L to this part.

12.4 The $PM_{10-2.5}$ mass concentration, in $\mu g/m^3$, is calculated using Equation 2 of this section:

Equation 2

$$PM_{10-2.5} = PM_{10c} - PM_{2.5}$$

13.0 Reference

1. Quality Assurance Guidance Document 2.12. Monitoring $PM_{2.5}$ in Ambient Air Using Designated Reference or Class I Equivalent Methods. Draft, November 1998 (or later version or supplement, if available). Available at: *www.epa.gov/ttn/amtic/pgqa.html*.

14.0 Figures

Figure O–1 is included as part of this appendix O.

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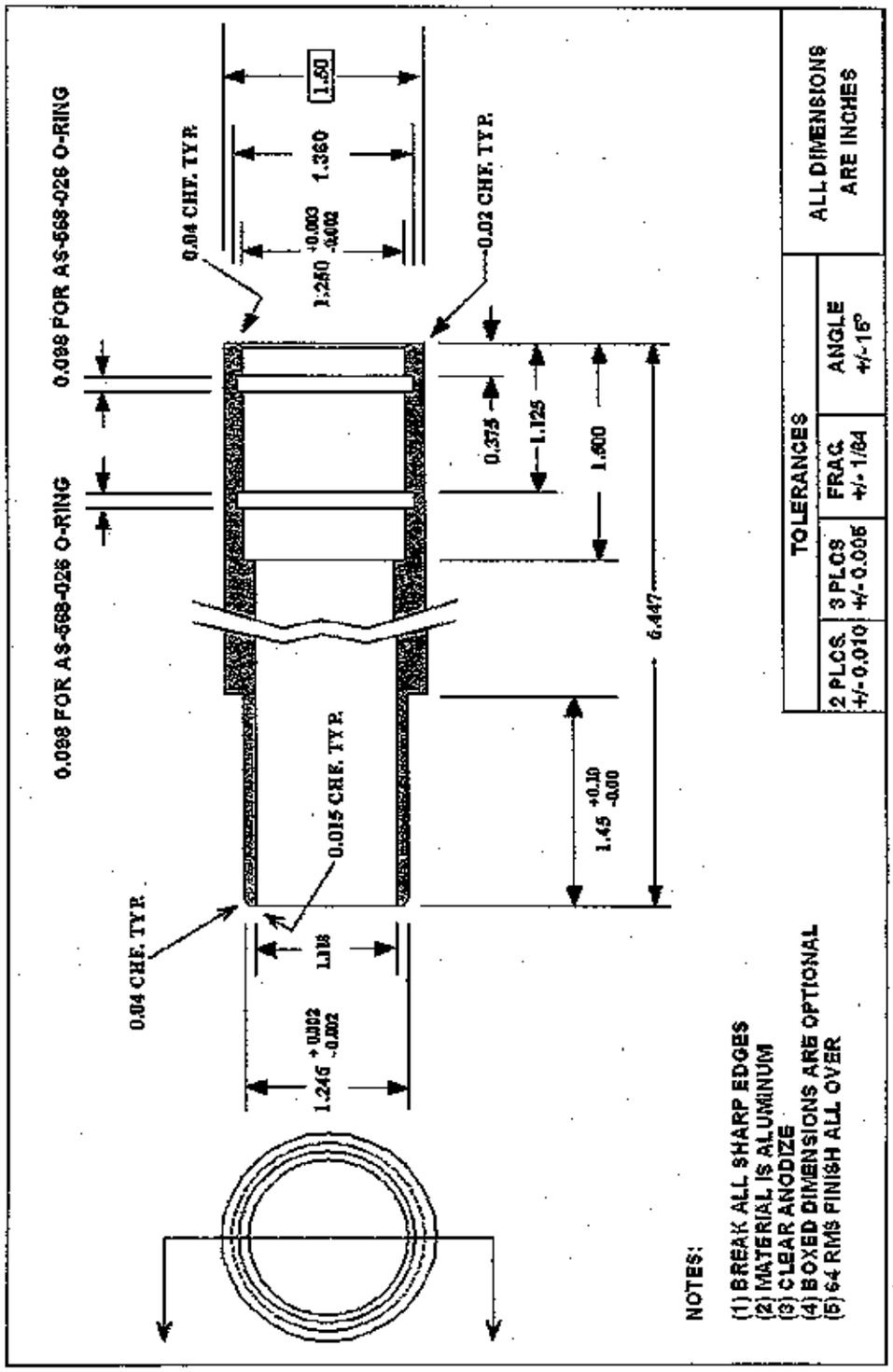
FIGURE Q-1. DOWNTUBE EXTENSION



[FR Doc. 06-8477 Filed 10-16-06; 8:45 am]
BILLING CODE 6560-50-C

Ministerio del Medio Ambiente
Gobierno de Chile

000057

OF. ORD. MMA Nº 110238 /

ANT.: No hay.

MAT.: Solicita designar contraparte técnica para conformar Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10.

SANTIAGO, 24 de Enero del 2011

DE : MARÍA IGNACIA BENÍTEZ PEREIRA
MINISTRA
MINISTERIO DEL MEDIO AMBIENTE

A : IGNACIO TORO LABBÉ
DIRECTOR EJECUTIVO
SERVICIO DE EVALUACIÓN AMBIENTAL

1. De acuerdo a lo prescrito en el Reglamento para la Dictación de Normas de Calidad Ambiental y de Emisión, DS N°93/95 de MINSEGPRES, en su artículo 36° menciona que "Toda norma de calidad ambiental y de emisión será revisada, según los criterios establecidos, a lo menos cada 5 años." Por lo anterior a través de Resolución Exenta Nº 21 de fecha 13 de Enero de 2010, publicada en el diario oficial el día 26 de marzo de 2010, da inicio al proceso de revisión de la Norma de Calidad Primaria de MP10 DS N°45/98 de MINSEGPRES.

2. En virtud de las atribuciones que el citado Reglamento confiere a este Ministerio, se ha estimado conveniente convocar a la formación de un Comité Operativo que intervenga en el proceso de elaboración de la mencionada revisión de norma. Este Comité estará constituido por representantes de los Ministerios, Servicios y demás Organismos del Estado, competentes en la materia. Los integrantes de este comité operativo fueron aprobados mediante Acuerdo Nº 416 del Consejo Directivo de CONAMA, actual Consejo de Ministros para la Sustentabilidad, con de fecha 26 de enero de 2010.

3. Para tales efectos, solicito a usted, designe un Representante Oficial y un reemplazante para dicho Comité Operativo, indicando la siguiente información para cada uno de ellos: nombre, departamento o unidad a la que pertenece dentro de su institución, número de teléfono y correo electrónico para asegurar un contacto expedito.

4. Agradeceré a usted enviar su respuesta a más tardar el día Lunes 24 de enero del presente, y paralelamente, enviar respuesta electrónica a: Daniela Caimanque F. Profesional del Departamento de Asuntos Atmosféricos de la División de Políticas y Regulación Ambiental del Ministerio de Medio Ambiente, cuyo teléfono es: 241 18 29 y correo electrónico: dcaimanque@mma.gob.cl

Sin otro particular, saluda atentamente a Ud.,

MARÍA IGNACIA BENÍTEZ PEREIRA
MINISTRA
MINISTERIO DEL MEDIO AMBIENTE

RIS/PMC/MPG/DCF/aat

C.c.:
- Gabinete Ministerio
- Expediente Revisión de Norma
- División de Políticas y Regulación Ambiental

Teatinos 258, Santiago Centro
Fono: (56-2) 240 5600
mma.gob.cl

592

000058

Ministerio del Medio Ambiente

Gobierno de Chile

OF. ORD. MMA Nº 110257 /

ANT.: No hay.

MAT.: Solicita designar contraparte técnica para conformar Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10.

SANTIAGO, 25 ENE. 2011

DE : MARÍA IGNACIA BENÍTEZ PEREIRA
MINISTRA
MINISTERIO DEL MEDIO AMBIENTE

A : SEGÚN DISTRIBUCIÓN

1. De acuerdo a lo prescrito en el Reglamento para la Dictación de Normas de Calidad Ambiental y de Emisión, DS Nº93/95 de MINSEGPRES, en su artículo 36° menciona que "Toda norma de calidad ambiental y de emisión será revisada, según los criterios establecidos, a lo menos cada 5 años." Por lo anterior a través de Resolución Exenta Nº 21 de fecha 13 de Enero de 2010, publicada en el diario oficial el día 26 de marzo de 2010, da inicio al proceso de revisión de la Norma de Calidad Primaria de MP10 DS Nº45/98 de MINSEGPRES.

2. En virtud de las atribuciones que el citado Reglamento confiere a este Ministerio, se ha estimado conveniente convocar a la formación de un Comité Operativo que intervenga en el proceso de elaboración de la mencionada revisión de norma. Este Comité estará constituido por representantes de los Ministerios, Servicios y demás Organismos del Estado, competentes en la materia. Los integrantes de este comité operativo fueron aprobados mediante Acuerdo Nº 416 del Consejo Directivo de CONAMA, actual Consejo de Ministros para la Sustentabilidad, con de fecha 26 de enero de 2010.

3. Para tales efectos, solicito a usted, designe un Representante Oficial y un reemplazante para dicho Comité Operativo, indicando la siguiente información para cada uno de ellos: nombre, departamento o unidad a la que pertenece dentro de su institución, número de teléfono y correo electrónico para asegurar un contacto expedito.

4. Agradeceré a usted enviar su respuesta a más tardar el día jueves 27 de enero del presente, y paralelamente, enviar respuesta electrónica a: Daniela Caimanque F. Profesional del Departamento de Asuntos Atmosféricos del Ministerio de Medio Ambiente, cuyo teléfono es: 241 18 29 y correo electrónico: dcaimanque@mma.gob.cl

Sin otro particular, saluda atentamente a Ud.,

MINISTERIO DEL MEDIO AMBIENTE

MARÍA IGNACIA BENÍTEZ PEREIRA
MINISTRA
MINISTERIO DEL MEDIO AMBIENTE

RJS/PMC/MFG/DCF/aat

Teatinos 258, Santiago Centro
Fono: (56-2) 240 5600
mma.gob.cl

000058 VTA

Distribución:

- Sr. Pedro Pablo Errázuriz Domínguez, Ministro de Transportes y Telecomunicaciones
- Sr. José Antonio Galilea, Ministro de Agricultura
- Sr. Jaime Mañalich Muxi, Ministro de Salud
- Sr. Hernán de Solminihac Tampier, Ministro de Obras Públicas
- Sr. Juan Andres Fontaine Talavera, Ministro de Economía, Fomento y Reconstrucción
- Sra. Magdalena Matte Lecaros, Ministra de Vivienda y Urbanismo
- Sr. Laurence Golborne Riveros, Ministro de Energía

c.c.:

- Gabinete Ministerio
- División de Estudios
- División Jurídica
- Expediente Revisión de Norma
- División de Políticas y Regulación Ambiental
- Departamento de Asuntos Atmosféricos

000059

Ministerio del Medio Ambiente
División Jurídica

Memorándum N°14

DE: Rodrigo Benítez Ureta
Jefe División Jurídica

A: Patricia Matus Correa
Jefe División de Políticas Públicas y Regulación Ambiental

Ant: Memo 37 de 17 de enero de 2011 (m.e. N°593)

MAT: Designa contraparte jurídica para revisión norma primaria MP10.

Fecha: 20 de enero de 2011

Informo a Ud. que he designado al abogado Conrado Ravanal Figari, a cargo de apoyar jurídicamente el proceso de revisión de la norma primaria de calidad ambiental de aire para MP 10.

Sin otro particular, saluda atentamente a Ud.

Rodrigo Benítez Ureta
Jefe División Jurídica

CRF
CC.
Archivo

Ministerio del Medio Ambiente

Gobierno de Chile

000060

División de Estudios
Ministerio del Medio Ambiente

MEMORÁNDUM Nº 17 /2011

De : Sr. Daniel Gordon A.
Jefe División de Estudios

A : Sra. Patricia Matus C.
Jefa División de Políticas y Regulación Ambiental

Ant. : Su Memo Nº37 del 17 de enero de 2011

Mat. : Designa representante para participar en proceso de revisión de la Norma de Calidad Primaria del MP10

Fecha : 26 de enero de 2011

Por medio del presente, doy respuesta a la solicitud presentada por usted, confirmando la designación del profesional Sr. Jorge Gomez L., profesional del Departamento de Economía Ambiental, como representante de esta División, para participar en el proceso de revisión normativo y de las reuniones del Comité Operativo, de la Norma de Calidad Primaria de MP10.

Sin otro particular, saluda atentamente a usted,

DANIEL GORDON A.
Jefe División de Estudios
Ministerio del Medio Ambiente

CDG/JGL/rgm
cc.: Arch. Div. Estudios

Teatinos 258, Santiago Centro
Fono: (56-2) 240 5600
mma.gob.cl

000061

Daniela Caimanque Fredes

De: Claudia Varela González [cvarela@minsal.cl]
Enviado el: Jueves, 27 de Enero de 2011 9:01
Para: Daniela Caimanque Fredes
CC: aaltamira@minsal.cl
Asunto: Informa Profesional designado.

Estimada Daniela:

En atención al Ord. Nº 110257 del Ministerio de Medio Ambiente con fecha del 25.01.2011, **rectifico** nominación solicitada en el mencionado Ord. Estos funcionarios son los representantes definitivos.

- Representante oficial: Dra. Sandra Cortés, Jefa del Departamento de Salud Ambiental, scortes@minsal.cl, 574 07 91

- Representante suplente: Sr. Walter Folch, profesional Departamento de Salud Ambiental, wfolch@minsal.cl, 574 07 87

Saludos,

Gobierno de Chile

Claudia Varela G.
Secretaria
Gabinete de Ministro
Ministerio de Salud
Anexo: 240417 / Teléfono: +56 (2) 5740417 www.minsal.cl

000062

Ministerio de Obras Públicas

Gobierno de Chile

ORD. : **Nº** 312

ANT. : ORD. Nº 110257, del 25 de Enero de 2011, de Ministra de Medio Ambiente.

MAT.: Designa contraparte técnica para conformar Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10

OF. DE PARTES RECIBIDO
02 FEB 2011
MINISTERIO DEL MEDIO AMBIENTE

A269

SANTIAGO, - 1 FEB. 2011

DE : LORETO SILVA ROJAS
MINISTRO DE OBRAS PÚBLICAS (s)

A : MARIA IGNACIA BENÍTEZ PEREIRA
MINISTRA DE MEDIO AMBIENTE

Por el presente cumplo con informar a usted, que se ha designado como contraparte técnica del Ministerio de Obras Públicas para conformar el Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10 a las siguientes profesionales:

Representante Oficial:

Nombre : Maria Angélica Arellano Escalera, Ingeniero Civil Industrial
Dirección: Morandé 59, oficina 411, Santiago
Teléfono: 02-4494001
Correo electrónico: angelica.arellano@mop.gov.cl

En calidad de reemplazante se designa a:

Nombre: Doris Aguila González, Ingeniero Químico
Dirección: Morandé 59, of. 411, Santiago
Teléfono: 02-4494005
Correo electrónico: Doris.aguila@mop.gov.cl

Saluda atentamente a usted

MARIA LORETO SILVA ROJAS
Ministra de Obras Públicas
Subrogante

SEMAT

JRP/AAE/gcb
DISTRIBUCIÓN:
- Destinataria
- SEMAT
- Of. Partes Subsecretaría

Proceso Nº 4504692

000063

Daniela Caimanque Fredes

De: Carla Diaz Puelma [cdiazp@minvu.cl]

Enviado el: Miércoles, 02 de Febrero de 2011 16:55

Para: Daniela Caimanque Fredes

CC: Javier Wood Larrain; Jurgen Kassens Pelikan; Teodosio Saavedra Morales

Asunto: Ord. N° 110257 de 25.01.11 Designa representante MINVU Comité Operativo revisión Norma Primaria Calidad Ambiental MP10

Estimada Daniela Caimanque F.

Junto con saludar, y en respuesta a lo solicitado mediante Oficio Ordinario del asunto, informo a Ud., que el Ministerio de Vivienda y Urbanismo ha designado como representante titular para conformar el Comité Operativo de revisión de la Norma Primaria de Calidad Ambiental MP10, al Arquitecto Teodosio Saavedra Morales, teléfono 351.3633, email tsaavedra@minvu.cl, y como reemplazante a la suscrita, ambos profesionales somos de la División de Desarrollo Urbano del MINVU.

Saluda cordialmente,

Carla Díaz Puelma
Departamento de Planificación y Normas Urbanas
Ing. Civil Industrial
División de Desarrollo Urbano

Ministerio de Vivienda y Urbanismo
(56-2) 351 3688 – 36 3674
cdiazp@minvu.cl

Gobierno de Chile

000064

OF. DE PARTES RECIBIDO
03 FEB 2011
MINISTERIO DEL MEDIO AMBIENTE

Ministerio de Transportes y Telecomunicaciones

H.B.
1.335

ORD. GM 452

ANT.: ORD N° 110257 de fecha 25 de enero de 2011.

MAT.: Responde oficio citado en el antecedente.

Santiago, 02 de febrero de 2011

A: María Ignacia Benítez Pereira
Ministra del Medio Ambiente

De: Pedro Pablo Errázuriz Dominguez
Ministro de Transportes y Telecomunicaciones

Junto con saludarle y en relación al oficio citado en el antecedente, informo a usted que el representante de este Ministerio, para conformar el Comité Operativo para revisión de la Norma Primaria de Calidad Ambiental para MP10 será el Sr. Pablo Salgado Poehlmann, profesional de la División de Normas de la Subsecretaria de Transportes (fono 421.34.18 – psalgado@mtt.cl)

Sin otro particular, le saluda muy atentamente,

MINISTERIO DE TRANSPORTES Y TELECOMUNICACIONES
MINISTRO
CHILE

Pedro Pablo Errázuriz Dominguez
Ministro de Transportes y Telecomunicaciones

PPG/val
Distribución
- la indicada
- Pablo Salgado Poehlmann – División de Normas Subtrans
- Oficina de Partes - MTT

Ministerio de Economía, Fomento y Turismo

Gobierno de Chile

Gabinete Ministro

000065

OF. DE PARTES RECIBIDO
07 FEB 2011
MINISTERIO DEL MEDIO AMBIENTE

n.b 1.443

ORD. N° 1205 04 FEB. 2011

ANT.: Su ORD. 110257 del 25.01.2011

MAT.: Informa representante.

DE : SR. JUAN ANDRÉS FONTAINE TALAVERA
MINISTRO DE ECONOMÍA, FOMENTO Y TURISMO

A : SRA. MARIA IGNACIA BENITEZ PEREIRA
MINISTRA DEL MEDIO AMBIENTE

En relación al antecedente, informo a usted que se ha designado al señor Pedro Vallejos, Asesor del Ministro de Economía, como representante de este Ministerio para ser contraparte técnica del Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10.

Sus correo electrónico es pvallejos@economia.cl y sus teléfonos son 4733827 y/o 4733629.

Saluda atentamente a Ud.

MINISTERIO DE ECONOMÍA
GABINETE MINISTRO

JUAN ANDRÉS FONTAINE TALAVERA
Ministro de Economía, Fomento y Turismo

JFT/CGO/cpc
DISTRIBUCION :
- Destinatario
- Gabinete Ministro Economía (101541)
- Oficina de Partes MINECOM

1.062

000066

Ministerio del Medio Ambiente

Gobierno de Chile

OF. ORD. MMA Nº 110433

ANT.: No hay.

MAT.: Envía anteproyectos normas de emisión para someter a consulta en la OMC.

SANTIAGO,

07 FEB. 2011

DE : SR. RODRIGO BENÍTEZ URETA
SUBSECRETARIO (S)
MINISTERIO DEL MEDIO AMBIENTE

A : SR. RODRIGO CONTRERAS
DIRECTOR DE ASUNTOS ECONÓMICOS BILATERALES
DIRECCIÓN GENERAL RELACIONES ECONÓMICAS INTERNACIONALES
MINISTERIO DE RELACIONES EXTERIORES

En el marco del Acuerdo sobre Obstáculos Técnicos al Comercio de la Organización Mundial de comercio (OMC) y con el objeto de dar cumplimiento a los procedimientos de notificación sobre futuras regulaciones de carácter ambiental que tendrá Chile, me permito enviar a usted, tres anteproyectos de norma de emisión, con objeto de someter a consulta en la OMC a través del Ministerio que usted representa.

Los anteproyectos de norma de emisión corresponden a:

1. Anteproyecto de Revisión de la Norma de Emisión de Gases TRS provenientes de la Fabricación de Pulpa Sulfatada. DS N° 167/99 MINSEGPRES.

2. Anteproyecto de Elaboración de la Norma de Emisión de Ruido para Vehículos Livianos, Medianos y Motocicletas.

3. Anteproyecto Revisión Norma de Emisión para la Regulación de la Contaminación Lumínica. D.S. N°686/98 MINECON.

En caso de consultas agradeceré contactar a la Srta. Daniela Caimanque F. Profesional del Departamento de Asuntos Atmosféricos de la División de Políticas y Regulación Ambiental del Ministerio de Medio Ambiente, cuyo teléfono es: (02) 241 18 29 y correo electrónico: dcaimanque@mma.gob.cl. Asimismo, el texto del anteproyecto como sus antecedentes se encuentran disponibles para observaciones en el sitio Web: http://epacplanesnormas.mma.gob.cl

Sin otro particular, saluda atentamente a Ud.,

MINISTERIO DEL MEDIO AMBIENTE * SUBSECRETARIO *

RODRIGO BENÍTEZ URETA
SUBSECRETARIO (S)
MINISTERIO DEL MEDIO AMBIENTE

RBU/RBC/PMC/DCF

Adj:
- Copia de Anteproyectos de normas mencionados.

C.c.:
- Gabinete Subsecretario
- División Jurídica
- Oficina de Asuntos Internacionales
- Expedientes Anteproyectos Normas en mención
- División de Políticas y Regulación Ambiental

Teatinos 258, Santiago Centro
Fono: (56-2) 240 5600

MB-1714

000067

Ministerio de Vivienda y Urbanismo
Gobierno de Chile

OF. DE PARTES RECIBIDO
15 FEB 2011
MINISTERIO DEL MEDIO AMBIENTE

ORD. N° 086 /

ANT.: Oficio Ord. N° 110257, de 25.01.11, Solicita designar contraparte técnica MINVU para conformar Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10.

MAT.: Designa contraparte técnica MINVU, ante Comité Operativo para la revisión de la Norma Primaria de Calidad Ambiental para MP10.

SANTIAGO, 11 FEB. 2011

A : SEÑORA MARÍA IGNACIA BENÍTEZ
MINISTRA DE MEDIO AMBIENTE

DE : MINISTRA DE VIVIENDA Y URBANISMO

Mediante oficio del Antecedente, solicita designar un representante oficial y su reemplazante, para conformar el Comité Operativo que intervenga en el proceso de revisión de la Norma Primaria de Calidad Ambiental de MP10.

Al respecto, comunico a usted que se designa como representante titular de este Ministerio, el Arquitecto Teodosio Saavedra Morales, teléfono 351.3633, email tsaavedra@minvu.cl, y se nombra como reemplazante a la Ingeniero Civil Industrial, Carla Díaz Puelma, teléfono 351.3688, email cdiazp@minvu.cl, profesionales ambos de la División de Desarrollo Urbano del MINVU.

000067 VTA

Sin otro particular, saluda atentamente a usted,

MINISTERIO DE VIVIENDA Y URBANISMO
MINISTRA

MAGDALENA MATTE LECAROS
MINISTRA DE VIVIENDA Y URBANISMO

MINISTERIO DE VIVIENDA Y URBANISMO
DIVISIÓN JURÍDICA

JWL/JKP/CDP
196 (97-9)
Distribución:

- Destinataria, Sra. Ministra de Medio Ambiente
- Sr. Subsecretario de Vivienda y Urbanismo (S)
- Gabinete Sr. Ministro de Vivienda y Urbanismo (S)
- Departamento de Planificación y Normas Urbanas DDU
- Archivo Medio Ambiente DDU
- Oficina de partes DDU

FCAB

MB-2068

000068

OF. DE PARTES RECIBIDO
25 FEB 2011
MINISTERIO DEL MEDIO AMBIENTE

OF. ORD. Nº 110245

ANT.: OF. ORD. MMA Nº 110238 de 24 de Enero de 2011

MAT.: Designa contraparte técnica para conformar Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10.

SANTIAGO, 25 FEB 2011

DE : ANDRÉS SÁEZ ASTABURUAGA
DIRECTOR EJECUTIVO (S)
SERVICIO DE EVALUACIÓN AMBIENTAL

A : MARÍA IGNACIA BENÍTEZ
MINISTRA MINISTERIO DE MEDIO AMBIENTE

En respuesta a su oficio señalado en ANT., mediante el cual se nos invita a ser contraparte técnica para conformar Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10, cumplo con informar a Usted que se designa a las siguientes profesionales de nuestra Institución, ambas de la División de Evaluación Ambiental y Participación Ciudadana.

Representante oficial:

Claudia Valenzuela
Departamento de Evaluación Ambiental
Fono: 6164222
Mail: cvalenzuela@sea.gob.cl

Reemplazante:

Jessica Fuentes
Departamento de Evaluación Ambiental
Fono: 6164221
Mail: jfuentes@sea.gob.cl

Sin otro particular, le saluda atentamente a usted,

SERVICIO DE EVALUACIÓN AMBIENTAL
DIRECTOR EJECUTIVO (S)

ANDRÉS SÁEZ ASTABURUAGA
DIRECTOR EJECUTIVO (S)
SERVICIO DE EVALUACIÓN AMBIENTAL

JCM/SHB/CVJ/JFO/doc

Distribución:
- Gabinete Ministerio de Medio Ambiente
- División de Política y Regulación Ambiental - Departamento de Asuntos Atmosféricos

c.c.:
- División de Evaluación Ambiental y Participación Ciudadana
- Oficina de Partes SEA

Ministerio del Medio Ambiente

Gobierno de Chile

000069

ORD. D.E. Nº 110675 /

ANT.: Of. Ord. MMA Nº 110257 de fecha 25.11.2011. Solicita designar contraparte técnica para conformar Comité Operativo.

MAT.: Invita a primera reunión de Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10.

SANTIAGO, 04 MAR. 2011

De : PATRICIA MATUS CORREA
JEFA DIVISIÓN DE POLITICAS Y REGULACION AMBIENTAL
MINISTERIO DEL MEDIO AMBIENTE

A : SEGÚN DISTRIBUCIÓN

En el marco del proceso de revisión de la Norma Primaria de Calidad Ambiental para MP10, DS Nº45/98 de MINSEGPRES, invito a usted a la primera reunión de Comité Operativo, a realizarse el día jueves 24 de Marzo de 2011, desde las 10:30 hasta las 12:30 hrs., en dependencias del Ministerio de Medio Ambiente (Teatinos Nº 258, 2º Piso, Santiago Centro).

En esta primera reunión se presentarán los antecedentes disponibles para el proceso de revisión de norma, propuesta preliminar de modificación y definición de los próximos compromisos.

Para confirmar asistencia puede tomar contacto con la profesional Daniela Caimanque F. Profesional del Departamento de Asuntos Atmosféricos del Ministerio de Medio Ambiente, cuyo teléfono es: 241 18 29 y correo electrónico: dcaimanque@mma.gob.cl

Sin otro particular, saluda atentamente a usted,

PATRICIA MATUS CORREA
JEFA DIVISION POLITICAS Y REGULACION AMBIENTAL
MINISTERIO DEL MEDIO AMBIENTE

PMC/MFG/BCF/jra

Distribución:
- Dra. Sandra Cortéz, Representante Oficial Ministerio de Salud
- Sra. María Angélica Arellano Representante Oficial Ministerio de Obras Públicas
- Sr. Pedro Vallejos, Representante Oficial Ministerio de Economía, Fomento y Reconstrucción.
- Sr. Pablo Salgado, Representante Oficial Ministerio de Transporte.
- Sra. Claudia Valenzuela, Representante Oficial Servicio de Evaluación Ambiental (SEA)

C.c.:

- Gabinete Ministerio
- Expediente Revisión de Norma
- Archivo División de Políticas y Regulación Ambiental
- Archivo Departamento de Asuntos Atmosféricos

Ministerio de Energía

Gobierno de Chile

000079

M-B 2373

OF. DE PARTES RECIBIDO
07 MAR 2011
MINISTERIO DEL MEDIO AMBIENTE

MINENERGIA OFICIO Nº 0387 /

ANT: OF. ORD. MMA Nº 110257, de 25 de Enero de 2011, del Ministerio del Medio Ambiente, mediante el cual solicita designar contraparte técnica para conformar Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP 10.

MAT: Se pronuncia sobre materia que indica.

SANTIAGO, 04 MAR 2011

A: SRA. MARÍA IGNACIA BENÍTEZ PEREIRA
MINISTRA DEL MEDIO AMBIENTE

DE: SR. LAURENCE GOLBORNE RIVEROS
MINISTRO DE ENERGÍA

En atención a lo solicitado en el oficio señalado en el antecedente, se informa a usted que se designa para el Comité Operativo del proceso de revisión de la Norma de Calidad Primaria de MP10, DS Nº 45/98 de MINSEGPRES, al Sr. Jaime Bravo Oliva, e-mail: jbravo@minenergia.cl, fono: 3656876, como Representante Oficial, y como Reemplazante a la Sra. Carolina Gómez Agurto, e-mail: cgomez@minenergia.cl, fono: 3656876, ambos pertenecientes a la División de Desarrollo Sustentable del Ministerio de Energía.

Sin otro particular, saluda atentamente a usted,

REPUBLICA DE CHILE

LAURENCE GOLBORNE RIVEROS
MINISTRO DE ENERGÍA

LJ/JBO/AVC/TSR/CGA/mnm

Distribución:
1. Destinatario.
2. Archivo Gabinete Ministro de Energía.
3. Archivo División Desarrollo Sustentable, Ministerio de Energía.

Alameda Libertador Bernardo O'Higgins 1449,
Edificio StgoDowntown II, Pisos 13 y 14,
Santiago, Chile
www.minenergia.cl

Ministerio del Medio Ambiente

Gobierno de Chile

000071

ORD. D.E. Nº 110702

ANT.: Of. Ord. MMA Nº 110257 de fecha 25.11.2011. Solicita designar contraparte técnica para conformar Comité Operativo.

MAT.: Reitera solicitud designación contraparte técnica para conformar Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10 e Invita a primera reunión.

SANTIAGO,

07 MAR. 2011

De : MARÍA IGNACIA BENÍTEZ PEREIRA
MINISTRA
MINISTERIO DEL MEDIO AMBIENTE

A : LAURENCE GOLBORNE RIVEROS
BI MINISTRO
MINISTERIOS DE MINERÍA Y ENERGÍA

En el marco del proceso de revisión de la Norma Primaria de Calidad Ambiental para MP10 - DS Nº45/98 de MINSEGPRES, reitero solicitud para designación de representante Oficial para participar en el Comité Operativo del mencionado proceso normativo, tanto del Ministerio de Minería como del Ministerio de Energía, según Acuerdo Nº 416 de fecha 26.01.2010 del Consejo Directivo de CONAMA, actual Consejo de Ministros para la Sustentabilidad, que aprobó los integrantes para dicho comité operativo.

Para tales efectos, solicito a usted, designe un Representante Oficial y un reemplazante, indicando la siguiente información para cada uno de ellos: nombre, departamento o unidad a la que pertenece dentro de su institución, número de teléfono, y correo electrónico para asegurar un contacto expedito.

Además por este medio invitamos a su representante a participar en la primera reunión de Comité Operativo, a realizarse el día jueves 24 de Marzo de 2011, desde las 10:30 hasta las 12:30 hrs., en dependencias del Ministerio de Medio Ambiente (Teatinos Nº 258, 2º Piso, Santiago Centro).

En esta primera reunión se presentarán los antecedentes disponibles para el proceso de revisión normativo, propuesta preliminar de modificación y definición de los próximos compromisos.

Por lo anteriormente expuesto, agradeceré a usted enviar su respuesta y confirmación de asistencia, a más tardar el día lunes 21 de marzo del presente, y paralelamente, enviar respuesta electrónica a: Daniela Caimanque F. Profesional del Departamento de Asuntos Atmosféricos del Ministerio de Medio Ambiente, cuyo teléfono es: 241 18 29 y correo electrónico: dcaimanque@mma.gob.cl

Sin otro particular, saluda atentamente a usted,

MINISTERIO DEL MEDIO AMBIENTE

MARÍA IGNACIA BENÍTEZ PEREIRA
MINISTRA
MINISTERIO DEL MEDIO AMBIENTE

MIBP/MFG/DCF/dcf

Adj: Of. Ord. MMA Nº 110257 de fecha 25.11.2011. Solicita designar contraparte técnica para conformar Comité Operativo de la revisión de la Norma Primaria de Calidad Ambiental para MP10.

C.c.:

- Gabinete Ministerio
- División de Estudios
- División Jurídica
- Expediente Revisión de Norma
- División de Políticas y Regulación Ambiental
- Departamento de Asuntos Atmosféricos

M-B. 3208.

Gobierno de Chile

000072

OF. DE PARTES RECIBIDO 25 MAR 2011 MINISTERIO DEL MEDIO AMBIENTE

OFICIO ORDINARIO Nº 224 /

ANT.: Oficio Nº 110702 de fecha 07 de Marzo de 2011 del Ministerio de Minería.

MAT.: Remite información solicitada.

SANTIAGO, 25 MAR 2011

DE : PABLO WAGNER SAN MARTÍN
SUBSECRETARIO DE MINERÍA

A : SRA. MARÍA IGNACIA BENÍTEZ PEREIRA
MINISTRA DEL MINISTERIO DE MEDIO AMBIENTE

Atendido el oficio del antecedente y lo solicitado en éste, hemos procedido al nombramiento de don Sebastián Lagos Valdivieso, de la División Jurídica del Ministerio de Minería, teléfonos 4733042- 4733033, correo electrónico; slagos@minmineria.cl como representante oficial de éste Ministerio para que participe en el Comité Operativo de la Norma Primaria de Calidad Ambiental para MP10.

En calidad de reemplazante se designa a doña María de la Luz Vásquez Martínez, Encargada Unidad Ambiental del Ministerio de Minería, teléfonos 02-4733035/ 02-4733049, correo electrónico; mvasquez@minminera.cl

Sin otro particular, saluda atentamente a usted,

REPUBLICA DE CHILE - MINISTERIO DE MINERIA - SUBSECRETARIO

PABLO WAGNER SAN MARTÍN
SUBSECRETARIO DE MINERÍA

Unidad Jurídica

MINISTERIO DE MINERIA ABOGADO DIVISION JURIDICA

JBC/MVM /SLV

DISTRIBUCIÓN :
- Destinatario.
- Gabinete Sr. Ministro de Minería
- Gabinete Sr. Subsecretario de Minería
- Unidad Ambiental
- División Jurídica
- Oficina de Partes y archivo.

PROCESO DE ELABORACIÓN ANTEPROYECTO
REVISION NORMA DE CALIDAD PRIMARIA PARA MATERIAL PARTICULADO FINO MP10

ACTA REUNIÓN Nº 1 – COMITÉ OPERATIVO

FECHA REUNIÓN: Jueves 24 de marzo de 2011
LUGAR: Dependencias de Ministerio de Medio Ambiente – Teatinos N° 258 2° piso.
HORARIO: de 10.30 a 12:00 hrs.

ASISTENCIA

Asistentes	Institución
Carolina Gomez	Ministerio de Energía
Teodosio Saavedra	Ministerio de Vivienda y Urbanismo
Walter Foich	Ministerio de Salud
Sandra Cortez	Ministerio de Salud
Sebastian Lagos	Ministerio de Minería
Jaime Román	Ministerio de Transporte y Telecomunicaciones
Pedro Vallejos	Ministerio de Economía
Claudia Valenzuela	Servicio de Evaluación Ambiental (SEA)
Roberto Martinez	Seremi de Medio Ambiente RM
Jorge Gomez	Ministerio de Medio Ambiente
Daniela Caimanque	Ministerio de Medio Ambiente
Marcelo Fernandez	Ministerio de Medio Ambiente
Conrado Ravanal	Ministerio de Medio Ambiente

DESARROLLO DE LA REUNIÓN

1. **Exposición "Proceso Normativo Revisión de Norma MP10"** Se realiza presentación adjunta y se señalan los siguientes puntos: Etapas del proceso normativo, antecedentes disponibles y plan de trabajo para el proceso de revisión de la norma.

2. **Temas tratados**
   Norma anual de MP10 se propone realizar en segunda reunión exposición y evaluación de los antecedentes que existen para su derogación, incluyendo los siguientes puntos:
   - Diferentes escenarios existentes con norma MP2.5 y Norma MP10
   - Impacto en el desarrollo de Planes de Descontamiancón y Prev. en Chile
   - Normativa Internacional

   Con los antecedentes disponibles, representantes del Ministerio de Salud evaluará la información existente sobre los efectos en salud de la exposición a largo plazo de este contaminantes, para emitir opinión fundada al respecto. De acuerdo a sus avances serán comentados en la siguiente reunión y con mayor detalle podrían presentar sus resultados en un plazo mayor a determinar en próxima reunión.

   Plan de Trabajo
   - ✓ Se entregará documento para envío de observaciones a la norma actual de MP10 indicando propuesta de modificación en los diferentes puntos de ésta.
   - ✓ Se sugiere entrega de presentaciones en papel para tomar nota en reuniones.
   - ✓ Los antecedentes existentes se subiran la Plataforma Virtual de Cooperación PVC, y tambien serán enviados vía e-mail aquellos que se generen en reuniones.

Fecha próxima reunión: **7 de abril de 2011 (Fecha propuesta se confirmará con invitación)**