



# The Fertilizer Institute

Nourish, Replenish, Grow

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## **VIA ELECTRONIC DELIVERY**

EPA Docket Center  
Public Reading Room, EPA West  
Room 3334  
1301 Constitution Avenue, N.W.  
Washington, DC 20460

**RE: *The Fertilizer Institute Comments on EPA's Proposed Rulemaking Entitled "Performance Specification and Quality Assurance Requirements for Continuous Parameter Monitoring Systems and Amendments to Standards of Performance for New Stationary Sources; National Emission Standards for Hazardous Air Pollutants; and National Emission Standards for Hazardous Air Pollutants for Source Categories," Docket No. EPA-HQ-OAR-2006-0640***

Dear Sir or Madam:

The Fertilizer Institute (TFI), on behalf of its member companies, submits these comments in response to the U.S. Environmental Protection Agency's (EPA or Agency) Notice of Proposed Rulemaking (NPRM) entitled *Performance Specification and Quality Assurance Requirements for Continuous Parameter Monitoring Systems and Amendments to Standards of Performance for New Stationary Sources* (hereinafter referred to as the "CPMS rule"), published in the *Federal Register* on October 9, 2008, and appearing at 73 Fed. Reg. 59956.

### **Statement of Interest**

TFI represents the nation's fertilizer industry including producers, importers, retailers, wholesalers and companies that provide services to the fertilizer industry. Its membership is served by a full-time Washington, D.C., staff in various legislative, educational and technical areas as well as with information and public relations programs.

Because several of our members fall under one of the source categories that may be subject to the proposed continuous parameter monitoring systems (CPMS) rule, TFI and its members have an interest in EPA's solicitation of comments regarding the possible regulation of performance specifications and quality assurance requirements for CPMS.

## **TFI General Comments**

TFI members understand that EPA requires compliance assurance for Clean Air Act regulatory requirements, and support the concept of demonstrating that CPMS provide data of adequate quality. However, as currently constructed, the proposed CPMS rule does not improve the quality of collected CPMS data, imposes unnecessary compliance requirements with no or negative environmental benefits at substantially greater cost to industry than quantified by EPA, and increases safety and emissions risks to potentially covered facilities.

EPA has not provided sufficient justification for the proposed CPMS rule. The Agency has provided no data showing existing problems with current CPMS requirements, or that there are any significant benefits resulting from the proposed new requirements. Rather, EPA justifies the proposed CPMS rule based on its own inherently governmental responsibility for assuring data of known quality by citing the “emphasis on ensuring data quality in response to section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554), which directs the OMB to issue guidelines that ‘provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information . . . disseminated by Federal agencies (73 FR 59961).’” TFI understands the Agency’s requirement to adopt “a basic standard of quality (including objectivity, utility, and integrity) as a performance goal and should take appropriate steps to incorporate information quality criteria into agency dissemination practices” as well as “a process for reviewing the quality (including objectivity, utility, and integrity) of information before it is disseminated . . . and that the process must ‘enable the agency to substantiate the quality of the information it has disseminated through documentation or other means appropriate to the information.’” *Id.*

EPA also justifies the proposed CPMS rule, in part, as an effort to implement the recommendations developed by the Air Quality Management Work Group in response to the National Research Council (NRC) report on Air Quality Management in the United States for improving emissions factors and reducing the uncertainty in emissions inventories and air quality modeling applications. The Agency states in its preamble (73 Fed. Reg. at 59962) that:

When emissions factors and other methods are used to estimate emissions from controlled sources, the assumption is that the control device is operating properly. The improved monitoring of air pollution control device parameters that would be achieved by the proposed PS-17 and Procedure 4 would help to ensure that affected control devices are operated properly, and, when problems arise, corrective action is taken in a timely manner. Furthermore, the improved monitoring will help to reduce the uncertainty and improve the reliability of emission estimates that typically are based on the assumptions that emission controls are being operated properly and are performing as designed.

TFI does not agree that the proposed CPMS rule would either improve emission factors or reduce the uncertainty in emissions inventories and air quality modeling. Rather, the potential increase in start-up, shut-down and malfunction emissions as well as emissions during required equipment checks and auditing procedures would add to the uncertainty in air quality data.

*TFI requests that EPA withdraw the proposed CPMS rule until such time as the Agency can adequately justify the regulations by providing some quantified estimate of the increased data accuracy expected from the rule and environmental benefits afforded by the rule, as well as an adequate justification of how the benefits of the rule outweigh the significant costs and risks inherent in the proposed regulations. TFI also requests that EPA provide more specific information on how the proposed CPMS rule would improve emission factors, reduce the uncertainty in emissions inventories, or increase the accuracy of air quality modeling.*

### **TFI Specific Comments**

#### **A. Incorporation by Reference of ACC/API Comments**

In their comments, the American Chemistry Council (ACC) and the American Petroleum Institute (API) discuss specific issues with proposed requirements of Performance Specification (PS)-17 and Procedure (P)-4 and recommend a plan approach that the two trade associations feel achieves the same result while minimizing the safety, environmental and cost concerns of the current proposal. TFI agrees with the detailed analyses included in those comments as well as the recommendation that the Agency adopt a plan approach and use PS-17 and P-4 to establish guidelines for the plan requirements. *Therefore, TFI incorporates the ACC/API comments by reference.*

#### **B. Applicability**

TFI understands that the proposed PS-17 and P-4 would apply to any facility that is required to install a new CPMS, relocate an existing CPMS, or replace an existing CPMS under any applicable subpart of 40 C.F.R. Parts 60, 61, or 63, with certain exceptions. The proposed PS-17 and P-4 would become effective upon permit renewal (or within five years for area sources that are exempt from title V permitting) for any affected facility subject to an applicable subpart of 40 C.F.R. Parts 60, 61, or 63, with certain exceptions. Relevant to TFI, included in the list of affected sources are (73 Fed. Reg. 59957):

- Miscellaneous Organic Chemical Manufacturing (40 C.F.R. Part 63, Subpart FFFF);
- Phosphate Fertilizer Industry (40 C.F.R. Part 60, Subparts T,U, V, W, X);
- Phosphate Rock Plants (with production capacity > 4 ton/hr) (40 C.F.R. Part 60, Subpart NN);
- Ammonium Sulfate Manufacture (40 C.F.R. Part 60, Subpart PP); and

- Calciners and Dryers in Mineral Industries (40 C.F.R. Part 60, Subpart UUU).
- Boiler and Process Heater MACT (40 C.F.R. Part 60, Subpart DDDDD)

TFI also understands that the exceptions to the applicability criteria for PS-17 and P-4 are those source categories that are subject to 40 C.F.R. Part 63 rules that specify that 40 C.F.R. § 63.8(a)(2) of the General Provisions for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories in 40 C.F.R. Part 63, Subpart A does not apply to the source category. Section 63.8(a)(2) specifies that rules promulgated under Part 63 are subject to the monitoring provisions of Section 63.8 upon promulgation of performance specifications (*i.e.*, the proposed PS-17). Consequently, rules which specify that 40 C.F.R. § 63.8(a)(2) does not apply are not subject to PS-17 or P-4, include (73 Fed. Reg. 59959):

- Phosphoric Acid Plants (40 C.F.R. Part 63, Subpart AA); and
- Phosphate Fertilizer Production (40 C.F.R. Part 63, Subpart BB).

As described in the preamble, EPA proposed to add PS-17, entitled “Specifications and Test Procedures for Continuous Parameter Monitoring Systems at Stationary Sources,” and P-4, entitled “Quality Assurance Requirements for Continuous Parameter Monitoring Systems at Stationary Sources,” to several subparts of 40 C.F.R. Parts 60, 61 and 63, with certain exceptions. EPA explained in the preamble to the applicability of PS-17:

If adopted as a final rule, owners and operators of emission sources that would be required to install and operate any such CPMS under any subpart of parts 60, 61, or 63 (listed in Table 1 of this preamble) would be required to comply with PS – 17, with the exception of facilities that are subject to the part 63 rules that are listed in Table 2 of this preamble. *Id.* at 59962. Procedure 4 is applicable to those facilities where PS – 17 is applicable. See *id.* As such, PS – 17 and Procedure 4 are not applicable to fertilizer facilities that are subject to 40 C.F.R. part 63, subparts AA and BB.

This is consistent with the regulatory provisions of 40 C.F.R. Part 63, Subparts AA and BB which specifically exempt those facilities from the New Source Performance Standard (NSPS) rules. For instance, 40 C.F.R. § 63.610, applicable to phosphoric acid manufacturing plants, provides:

Any affected source subject to the provisions of this subpart is exempted from any otherwise applicable new source performance standard contained in 40 C.F.R. part 60, subpart T, subpart U or subpart NN. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of this subpart. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements

of §§ 63.604, 63.605 and 63.606 have been met.

Similarly, for the phosphate fertilizer industry, 40 C.F.R. § 63.631 provides:

Any affected source subject to the provisions of this subpart is exempted from any otherwise applicable new source performance standard contained in 40 C.F.R. part 60, subpart V, subpart W, or subpart X. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of this subpart. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of §§ 63.624, 63.625, and 63.626 have been met.

Therefore, based on the discussion above, TFI concludes that facilities meeting the applicability criteria for certain NSPS subparts, as well as the applicability criteria for the 40 C.F.R. Part 63, Subparts AA and BB, need not comply with the NSPS regulations provided the exemptions cited above are satisfied. Provided the exemptions are applicable, EPA's proposed PS-17 and P-4 would not affect those facilities regulated under 40 C.F.R. Part 63, Subparts AA and BB. *TFI requests that EPA confirm this understanding or provide additional clarification.*

### C. Costs

TFI understands that the CPMS rule will require significant effort on the part of affected facilities to achieve compliance and maintain the required records. Based on discussions with technical staff at a number of companies, TFI believes that EPA has grossly underestimated the costs of implementing this rule. One TFI member who estimated the costs of implementing this rule on its continuous emission monitoring systems estimated initial costs of \$254,000 for pressure drop and flow meter CPMS equipment, and annual costs of \$109,000 for monthly calibration and accuracy audits. Most of the capital costs are for purchase and installation of redundant systems. The calibration and accuracy check costs would be ongoing. Note that these costs are for a single facility. Also, cost estimates do not include supervisory costs, costs of record keeping and internal audits, costs of replacing sensors that do not meet proposed CPMS rule requirements, costs of installing platforms and access points for the sensors to perform audits, or costs associated with shutting down processes for taking out and inspecting sensors such as thermocouples and orifice plates.

From our discussions with members and initial cost estimates, it is clear that EPA's estimated costs of less than \$1,000/year for the first four years are grossly underestimated and need to be reexamined. The capital costs and burdens associated with the proposal are greatly underestimated. As proposed, this is a major rulemaking under law and Executive Orders and, if not revised, must be dealt with accordingly. *TFI requests that the Agency withdraw the proposed CPMS rule until it can be adequately revised and reviewed as a major rulemaking.*

#### **D. Overly Burdensome and Ambiguous Requirements**

Under the proposed CPMS rule, PS-17 appears to apply to all monitoring systems that continuously measure temperature, pressure, liquid flow rate, gas flow rate, mass flow rate, pH, and conductivity if the measurement is required by any subpart other than certain 40 C.F.R. Part 63 subparts. There is no justification for imposing extensive QA/QC requirements on indicators or monitors where the exact measured value is not critical to assuring compliance or demonstrating proper control operation.

CPMS where QA/QC has already been addressed - including CPMS under the Compliance Assurance Monitoring (CAM) rule, instrumentation systems included in Safe Instrumented Systems (SIS) required by 29 C.F.R. § 1910.119 and meeting U.S. Occupational Safety and Health Administration (OSHA) standards, and CPMS covered by regulatory QA/QC requirements or performance standards - do not need duplicative coverage.

*TFI requests that EPA include provisions in the revised proposed CPMS rule stating that CPMS covered by existing plans should not be subject to PS-17 and P-4. TFI also requests clarification on which continuous parameter monitors are subject to the new requirements and which are not. Finally, TFI requests that EPA make clear that only continuous parameter monitors where a specific value is measured as a demonstration of continuous compliance, and where continuous records are required, should be subject to PS-17 and P-4.*

#### **E. Unintended Risks**

TFI believes that the proposed CPMS rule will greatly increase environmental emissions and safety risks well beyond any benefits resulting from data accuracy. TFI members are very concerned about the potential increase for personnel exposures to hazardous chemicals and to risks associated with exposure to high and low temperature, high pressure and electric shock as well as increased fire and explosion risk. The proposed CPMS rule also will increase environmental emissions due to unnecessary equipment purging, unnecessary startups and shutdowns, and malfunctions associated with the unnecessarily frequent interventions with these instruments.

*TFI requests that EPA withdraw the proposed CPMS rule until such time as the Agency can revise the equipment check and auditing requirements to adequately account for potential increases in safety risks and increased environmental emissions.*

#### **F. Compliance Schedule**

EPA has proposed a phased schedule for achieving compliance that TFI believes is unworkable.

The proposed rule states that for (1) CPMS located at facilities that are required to obtain a Title V permit, the final rule will become effective at the time of permit renewal, (2) CPMS located at area sources that are exempt from obtaining a Title V permit, facilities will have five years after the date of publication of the final rule in the *Federal Register*, and (3) CPMS located at all other existing units, the final rule will become effective anytime they repair a CPMS by replacing the electronic signal modifier or conditioner, transmitter, external power supply, data acquisition system, data recording system, or any other mechanical or electrical component of the CPMS that affects the accuracy, range, or resolution of the CPMS after 90 days following the date of publication of the final rule in the *Federal Register*.

TFI believes this rule will require some Title V sources to comply with the rule within a few months after it is final (based on renewal schedules), while other Title V facilities will have up to five years. This implementation schedule creates unjustifiable recordkeeping and regulatory compliance requirements for affected sources as well as an untenable workload on regulating agencies. *TFI requests that a revised CPMS rule require that all CPMS should have until five years after rule finalization to meet these new requirements, and that CPMS that begin operation after that date should have to comply within 180 days of startup.*

#### **G. PS-17 and P-4 Specific Comments**

##### 8.7 How often must I perform an accuracy audit of my CPMS? (73 Fed. Reg. at 59999)

Depending on the parameter measured (temperature, pressure, flow, pH, or conductivity), you must perform the accuracy audits according to the frequencies specified in paragraphs (1) and (2) of this section.

- (1) Temperature, Pressure, Flow, and Conductivity. If your CPMS measures temperature, pressure, flow rate, or conductivity, you must perform an accuracy audit of your CPMS at least quarterly using the procedures specified in sections 8.1 through 8.3 and 8.5, respectively, of this procedure. You also must perform within 48 hours an accuracy audit of your CPMS following any periods of at least 24 hours in duration throughout which:
  - (i) The value of the measured parameter exceeded the maximum rated operating limit of the sensor, as specified in the manufacturer's owner's manual, or
  - (ii) The value of the measured parameter remained off the scale of the CPMS data recording system.

TFI feels that this requirement adds additional and unnecessary documentation. Instrumentation covered under Title V permits currently require yearly documentation of accuracy audit data.

There would be an additional layer of notification and documentation required because of the time constraints for conducting the audits based on (i) and (ii). *TFI requests that an audit only be required if the problem is associated with the instrument itself and not because of external causes such as connection leaks, clogging, etc., that may affect readings but not the status of the instrument.*

#### 8.8 What other checks must I do on my CPMS? (73 Fed. Reg. at 59999)

According to the parameter being measured (temperature, pressure, flow, pH, or conductivity), you must perform the additional checks specified in paragraphs (1) through (4) of this section.

- (2) Pressure. At least monthly, check all mechanical connections for leakage. If your pressure CPMS is not equipped with a redundant pressure sensor, at least quarterly, perform a visual inspection of all components of the pressure CPMS for physical and operational integrity and all electrical connections for oxidation and galvanic corrosion. You must take necessary corrective action to replace or repair any damaged components as soon as possible.
- (3) Flow Rate. At least monthly, check all mechanical connections for leakage. If your flow CPMS is not equipped with a redundant flow sensor, at least quarterly, perform a visual inspection of all components of the flow CPMS for physical and operational integrity and all electrical connections for oxidation and galvanic corrosion. You must take necessary corrective action to replace or repair any damaged components as soon as possible.

To formally conduct and document leak checks every month would require additional personnel. During the checks (and calibrations) the instruments are out-of-service and hence would affect the daily compliance averages for the parameters if no provisions are made to account for this downtime. The performance of the monthly leak checks creates the possibility of increased frequency of leaks because of manipulating the connections to the instruments. As proposed, the CPMS rule would require additional work and documentation for little data quality benefit and increased environmental emissions. *As such, TFI requests that present process management systems be used for scheduling and tracking leak checks.*

#### 8.6 How do I perform an initial validation check of my flow CPMS? (73 Fed. Reg. at 59987)

To perform the initial validation check of your flow CPMS, you can choose any one of the methods described in paragraphs (1) through (7) of this section that is applicable to the type of material measured by your flow CPMS and the type of sensor used in your flow CPMS.

- (1) Volumetric Method.
- (2) Gravimetric Method.
- (3) Differential Pressure Measurement Method.

- (4) Pressure Source Flow Simulation Method.
- (5) Electronic Signal Simulation Method. {emphasis added}**
- (6) Relative Accuracy (RA) Test.
- (7) Material Weight Comparison Method.

### 8.3 How do I perform an accuracy audit for my flow CPMS? (73 Fed. Reg. at 59996)

To perform the accuracy audit on your flow CPMS, you can choose one of the methods described in paragraphs (1) through (7) of this section that is applicable to the type of material measured by your flow CPMS and the type of sensor used in your flow CPMS.

- (1) Comparison to redundant flow sensor.
- (2) Volumetric Method.
- (3) Gravimetric Method.
- (4) Separate Sensor Check and System Check by Differential Pressure Measurement Method. (applies only to flow CPMS that use a differential pressure measurement flow device)
- (5) Separate Sensor Check and System Check by Pressure Source Flow Simulation Method. (applies only to flow CPMS that use a differential pressure measurement flow device)
- (x) Electronic Signal Simulation Method. {missing}**
- (6) Relative Accuracy (RA) Test.
- (7) Material Weight Comparison Method.

*The Electronic Signal Simulation Method was omitted from Procedure 4, Section 8.3. It should be added to the list.*

## **Conclusion**

TFI appreciates your consideration of these comments on EPA's NPRM. Because the current proposal is conceptually and structurally flawed, imposes requirements beyond what is needed to provide a reasonable assurance of compliance, generates significant safety and environmental concerns, and imposes unreasonable costs and operating disruptions for little environmental or data quality benefits, TFI requests that EPA withdraw the proposed CPMS rule until such time as a justifiable, workable and reasonable CPMS rule can be proposed that meets all federal requirements for a major rulemaking.

Please contact me at (202) 515-2706 if you would like to further discuss our comments.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "William C. Herz".

William C. Herz  
Vice President, Scientific Programs