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United States Government **Department of Energy**

memorandum

DATE: October 28, 1997

REPLY TO ATTN OF: Office of Environmental Policy and Assistance:Koss:202-586-7964

SUBJECT: Final Clean Air Act Rule on Compliance Assurance Monitoring

TO: Distribution

In order to meet requirements concerning enhanced emissions monitoring and compliance certification in the 1990 Clean Air Act Amendments, the Environmental Protection Agency (EPA) promulgated a final rule in the October 22, 1997, *Federal Register* (62 *FR* 54900) that establishes "compliance assurance monitoring"(CAM) for major stationary sources of air pollution which are required to obtain Clean Air Act operating permits. The CAM rule requires owners and operators of affected sources to monitor the operation and maintenance of their air emissions control equipment so that they can evaluate the performance of their control devices and report on the compliance of their sources with established emission standards. The regulations also provide procedures for coordinating these new requirements with EPA's operating permits program regulations. The rule is effective on November 21, 1997. An EPA Fact Sheet on the regulations is attached to this memorandum. A copy of the *Federal Register* notice (49 pages) can be accessed and downloaded from the EH-41 Web Site (http://tis-nt.eh.doe.gov/oepa/) by clicking on the "What's New" button, or by clicking on the "Policy and Guidance" button, then clicking on the "Clean Air Act" link. EH-41 will develop a guidance document on this rule that will address, among other issues, its applicability to DOE air sources.

For further information, please contact Ted Koss of my staff at 202-586-7964 or theodore.koss@eh.doe.gov.

(original signed by Andrew Wallo III)

Andrew Wallo III
Director
Air, Water and Radiation Division

Attachment

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cc: **Other Organizations**

National Low-Level Waste Management Program, EG&G Idaho
Hazardous Waste Remedial Action Program, (HAZWRAP)
Remedial Action Program Information Center
Center for Environmental Management Information

10-1-97

FACT SHEET

COMPLIANCE ASSURANCE MONITORING

TODAY'S ACTION

- Today, the Environmental Protection Agency (EPA) is issuing a regulation that will help facility owners conduct effective monitoring of their air pollution control equipment. If monitoring is conducted properly, facility owners will be able to assure state and local agencies, EPA, and the public that they comply with established emissions standards [hence the title Compliance Assurance Monitoring (CAM)]. Note that in earlier stages this action was known as the "enhanced monitoring" rule.

- EPA establishes emissions standards to protect public health and the environment. It is therefore important that affected facilities comply with these standards.

- The CAM rule requires owners and operators to monitor the operation and maintenance of their control equipment so that they can evaluate the performance of their control devices and report whether or not their facilities meet established emission standards.

- If owners and operators of these facilities find that their control equipment is not working properly, the CAM rule requires them to take action to correct any malfunctions and to report such instances to the appropriate enforcement agency (i.e., State and local environmental agencies).

- Additionally, the CAM rule provides some enforcement tools that will help State and local environmental agencies require facilities to respond appropriately to the monitoring results and improve pollution control operations.

BACKGROUND

- The Clean Air Act includes provisions (Title V) that describe the requirements of permit programs, permit applications, as well as permit requirements and conditions. These provisions also address other aspects of the permits program such as compliance, enforcement, submission of applications, and approval of permits.

- EPA requires facilities that emit pollution into the air to obtain a permit to operate. This permit (known as an "operating permit") contains information about how the facility will comply with established emissions standards and guidelines. Operating permits provide facility owners, State inspectors, and the public with specific information about the air pollution regulations that apply to each facility. The operating permits program will improve compliance with existing regulatory requirements and ensure that desired

emission reductions actually occur and are maintained.

- The Clean Air Act Amendments (Title VII) of 1990 also authorize EPA to develop regulations requiring facilities to monitor the performance of their emission control equipment. In September 1993, EPA proposed an "enhanced monitoring" rule that established general monitoring criteria that facilities should follow to demonstrate continuous compliance. Many state and local agencies, industry representatives and other stakeholders strongly criticized the proposed rule. They believed the proposed rule was overly prescriptive and would have imposed excessive burden on industry to install and operate continuous emission monitoring equipment and on State and local agencies in implementing their operating permit programs.

- Since April 1995, EPA has held numerous meetings with major stakeholders to develop a new, more flexible approach to enhanced monitoring. Through this stakeholder process, EPA redrafted the enhanced monitoring rule and in September 1995, released a new draft rule that changed the focus to compliance assurance.

- The extensive comments that EPA received on the draft CAM rule indicated the need for additional EPA analysis of the compliance assurance monitoring approach and other associated issues. Based on these comments, EPA revised the draft rule and issued a second draft for public comment on August 2, 1996, with a public comment period that ended October 15, 1996. Today, EPA is issuing the final version of the CAM rule.

WHAT ARE THE ENVIRONMENTAL BENEFITS OF THE CAM RULE?

- Approximately 10 percent of processes at major industrial facilities that are subject to air pollution emission standards are fitted with air pollution control equipment. [It is important to note that not all processes or facilities require the use of control devices to meet establised emission standards. Some facilities achieve emission reductions through other techniques.] Approximately 60 percent of these facilities are covered by the CAM rule. Altogether, the control devices monitored under the CAM rule will control over 97 percent of the total emissions from all facilities utilizing air pollution control devices and receiving operating permits.

- The CAM rule is designed to improve compliance with EPA's emission standards. It is important that facilities comply with these standards as they are designed to protect public health and the environment.

HOW DOES THE CAM RULE DIFFER FROM THE PROPOSED ENHANCED MONITORING RULE?

- EPA's September 1993 proposed enhanced monitoring rule focused on direct compliance monitoring which in many cases might have required affected facilities to install expensive

continuous emission monitoring systems (CEMS) or develop other monitoring directly correlated with emission values.

- In contrast, the compliance assurance monitoring approach builds on regulatory monitoring approaches already in place at the facilities in question. Its purpose is to provide reasonable assurance that facilities comply with emission limitations by monitoring the operation and maintenance of their control devices with the same high level of attention that is given to the manufacturing or production portions of the facility.

- The CAM rule defines minimum applicable monitoring, operation, and maintenance requirements to ensure that the equipment does not deteriorate to the point of failing to comply with emission limits. As a result of these minimum requirements, EPA believes that the CAM rule will improve compliance with the Clean Air Act; the rule will help facilities achieve emission reductions as well as decrease the need for additional regulations.

WHAT CHANGES HAS EPA MADE TO THE CAM RULE SINCE THE SEPTEMBER 1995 AND AUGUST 1996 DRAFTS?

- EPA received extensive public comments from stakeholders on its initial draft of the compliance assurance monitoring rule issued in September 1995 and a second draft issued in August 1996. There were three principal areas of concern revealed by the comments: 1) who would be affected by the rule; 2) the requirements for the monitoring and the relationship to the operating permit; and 3) compliance certification requirements including use of data obtained from methods other than the specified test method.

- EPA addressed these concerns in the August 2, 1996 draft, and has made them part of the final rule:

  1) EPA greatly simplified the applicability of the rule. In order to focus the requirements of the CAM rule on preventing pollution control problems before they occur, EPA determined that the CAM rule would apply only to those units with control devices (active controls). Further, whether an emission unit is subject to the rule is defined by the level of emissions that would occur without the control device in place (i.e., pre-control emissions). This approach to defining which units must have monitoring will ensure that control devices, which must be operated at the highest efficiencies in order to comply with emission limitations, are properly monitored.

  2) EPA streamlined the monitoring requirements so that only the important monitoring elements are included in the Title V operating permit. The operating permit will include the facility's approach to monitoring, the acceptable range of control device operation, and the basic data quality assurance criteria. The

detailed day-to-day monitoring operations are left to the facility owner to maintain and are not part of the permit.

3) The compliance certifications will include the applicable compliance requirements, the methods/monitoring used to determine compliance status, the compliance status, and the identification of any possible exceptions to compliance based on the monitoring.

WHAT ARE THE MAIN COMPONENTS OF EPA'S CAM RULE?

- The CAM rule establishes criteria that define what monitoring of existing control devices that the source owner or operator should conduct to provide reasonable assurance of compliance with emission limits and standards. This monitoring will help source the owner or operator certify compliance under the Title V operating permits program.

- The CAM rule includes Title V compliance certification language that allows the source owner or operator to use compliance assurance monitoring data to establish their compliance status with permit terms or conditions. They can then use this information to certify that their facilities comply with air pollution control requirements, as required by the Clean Air Act.

- For situations where continuous compliance monitoring is already specified in an operating permit, the rule exempts the owner or operator from additional CAM rule-related monitoring requirements and directs the owner or operator to use the continuous compliance monitoring data to fulfill the CAM rule monitoring and certification requirements.

- For emission units with control equipment, the rule requires the owner or operator to develop and conduct monitoring. The monitoring will include an acceptable range with in which to operate the control device (known as an “indicator range”). Generally, facility owners will use results of performance tests in conjunction with equipment design or other information to determine the indicator ranges that (if the equipment is operated within those ranges) will provide a reasonable assurance of compliance with emission limitations.

- Operating control devices within acceptable ranges, as they were designed to operate, will minimize emissions and provide reasonable assurance that the facility is complying with permit terms and conditions.

- If control equipment is found to be operating outside acceptable ranges owners and operators will be required to take prompt corrective actions to make necessary adjustments to the control equipment as well as notify State and local authorities that potential compliance problems may exist.

- If the control equipment is found to be operating outside the indicator range for long periods of time, the CAM rule provides optional tools for the State or local (or Federal if necessary) permitting authority to require more intensive evaluation and improvement of control practices.

WHO WILL BE AFFECTED BY THE CAM RULE?

- The CAM rule applies to facilities that operate emission control devices in accordance with federally enforceable regulations (issued prior to 1990). These federal regulations are not limited to EPA regulations, instead they include any regulation that pertains to the Title V operating permit.

- With the passage of the 1990 Clean Air Act Amendments, EPA incorporated "directly enforceable monitoring" into all emission regulations. In some cases, this monitoring is more stringent than the monitoring required under the CAM rule.

- Therefore, this rule does not apply to facilities that are subject to EPA regulations issued after 1990. However, it is possible that some portions of a facility operate control devices in order to comply with emission standards issued prior to 1990. In this case, these portions of the facility must comply with the requirements of the CAM rule.

HOW DOES THE CAM RULE AFFECT SMALL BUSINESS?

- With few exceptions, the CAM rule does not include specific allowances to reduce the rule applicability for small businesses; however, the actual burden associated with the monitoring is relatively small. The EPA estimates that of the approximately 9000 facilities affected by the rule about 55 percent are small firms. Of those small firms, EPA estimates that less than 1 percent will experience a cost of more than 1 percent of annual revenues. None would experience costs of more than 3 percent of annual revenues.

WHAT ENFORCEMENT TOOLS IS EPA PROVIDING TO STATE AND LOCAL AGENCIES?

- The operating permits program requires facility owners periodically (at least annually) to report on the compliance status for each requirement in the permit and note any periods of operation outside the established CAM indicator ranges. These compliance certification reports along with the monitoring results are valuable tools for the enforcement agency to use in identifying facilities with significant compliance problems and in deciding how to target limited enforcement resources.

- To address persistent control device problems indicated by excessive periods of operation outside the established indicator ranges, the CAM rule allows State and local agencies to require the owner or operator to implement a quality improvement plan (QIP). A QIP is

a comprehensive two-step evaluation and correction process that will require the facility owner to prepare a formal plan and schedule for correcting control device problems. Such activities may include significant repairs to or even replacement of control devices.

WHAT IS THE RELATIONSHIP BETWEEN CAM AND ENFORCEMENT RESULTING FROM THE CREDIBLE EVIDENCE RULE?

- Given that operating an air pollution control device outside the acceptable range will not necessarily indicate that the facility is out of compliance, the CAM rule cannot and does not replace a facility's obligation to comply with emission limits that otherwise apply. Nonetheless, EPA expects that a unit that is operating within appropriately established ranges as part of an approved CAM plan will, in fact, be in compliance with its applicable emission limits. For this reason, units operating within their CAM indicator ranges will be presumed to be in compliance and will not be targets for enforcement actions.

- For more information on the credible evidence rule see the February 24, 1997, Federal Register notice.

FOR FURTHER INFORMATION

- Interested parties can download the rule from EPA's web site on the Internet under recently signed rules at the following address: (http://www.epa.gov/ttn/oarpg/rules.html). For further information about the rule, contact Mr. Peter Westlin of EPA's Office of Air Quality Planning and Standards at (919) 541-1058.

- EPA's Office of Air and Radiation’s homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The Office of Air and Radiation's home page address is: (http://www.epa.gov/oar/).