



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 27 2006

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Leslie Ritts
NEDA/CAP
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Dear Ms. Ritts:

This letter is in response to your October 3, 2006, request for an Agency response to questions raised by the Council of Boiler Owners (CIBO) and the American Forest & Paper Association (AF&PA) regarding the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD).

As you know, the Agency received several petitions for reconsideration of certain provisions in the September 2005, final rule. As a result, the Agency decided to delay the response to the questions raised until the petitions for reconsideration were addressed. However, as you are aware, responses to several questions deemed high priority by AF&PA and others were provided. Copies of our responses to the high priority questions are attached.

The Agency granted reconsideration for issues raised by the petitioners regarding the Health-Based Compliance Alternatives (40 CFR Section 63.7507 and Appendix A) and the emission averaging provisions. On June 27, 2005, EPA published notice of its reconsideration of certain aspects of the Health-Based Compliance Alternatives and requested comment on these issues (70 FR 36907). EPA completed final action on this reconsideration on December 28, 2005, (70 FR 76918). EPA also proposed amendments to the emission averaging provisions, along with other minor technical corrections, on October 31, 2005 (70 FR 62264). EPA finalized these amendments on December 6, 2006 (71 FR 70651). Many of our responses to the questions listed in your October 3, 2006, request, are based on the changes and clarifications provided by these amendments.

Please note that the numbering of the questions in your request will not match the numbering of the questions in this response due to the fact that your request includes a compilation of several different lists of questions. In addition, note that only one response is provided for duplicative questions listed in your request.

We would also like to point out that the issues raised by CIBO (dated April 20, 2004) are based on the proposed rule language and not the final rule language (September 13, 2004). Several of the issues raised by CIBO refer to sections of the proposed rule that either no longer exist or have been changed. In addition, many of the issues raised by CIBO are not questions but requests for rule changes. This document does not include responses to issues related to the proposed rule language or requests for rule changes.

Finally, please be aware that the responses to the 49 questions included in this document are not site-specific and may not apply in all cases. Response to questions related to the general provisions as they apply to Subpart DDDDD may not be applicable to other subparts of the NESHAP program. As with all applicability determinations, site-specific information should be carefully reviewed before making a determination.

1) Can a de minimis threshold be established to exclude miscellaneous materials burned for energy recovery and waste minimization (e.g., office paper, oily rags, sorbent materials, etc.) from testing and recordkeeping under Subpart DDDDD?

No. Subpart DDDDD does not provide a de minimis threshold exclusion for miscellaneous materials. See attached letter from Michael Alushin, Director, Compliance Assessment and Media Programs Division to Timothy Hunt, Senior Director, Air Quality Programs, American Forest and Paper Association, February 3, 2006.

2) Many solid fuel boilers burn natural gas to stabilize solid fuel combustion or provide additional energy input. Natural gas is an inherently clean fuel and would have little, if any, total selected metals (TSM), chlorine (Cl), or mercury (Hg). Natural gas is a fuel type according to a strict reading of the regulations and would have to be analyzed. Testing natural gas presents safety issues and would be a waste of resources. Can the presence of TSM, Cl, and Hg be concluded to be zero when determining maximum fuel input (performance test option) and maximum emission rates (fuel analysis option)?

Yes. We expect natural gas to contain insignificant amounts of TSM, chlorine, and Hg. See attached letter from Michael Alushin, Director, Compliance Assessment and Media Programs Division to Marceia L. Cox, Program Manager, Environmental Support, International Paper, April 21, 2006. Therefore, in the absence of exceptional circumstances, in the situation described above, the concentrations of TSM, Chlorine, and Hg in natural gas can be assumed to be zero for the purpose of demonstrating compliance under Subpart DDDDD using fuel analysis.

3) For Electrostatic Precipitators (ESPs) without additional wet control systems, do the operating limits include minimum voltage and secondary current (or total power)?

No. Minimum voltage and secondary current (or total power input) are only applicable operating limits for boilers and process heaters that operate ESPs with

additional wet control systems. Under the operating limits, sources equipped with ESPs without additional wet controls must maintain opacity at or below 20% for existing sources and 10% for new sources. Subpart DDDDD Tables 2 and 3.

4) Can Non-condensable gases (NCGs) and Stripper Overhead Gases (SOGs) be excluded from consideration when establishing maximum fuel inputs (performance test option) and maximum emission rates (fuel analysis option)?

No. NCGs and SOGs can not be excluded from consideration when establishing maximum fuel inputs (using the performance test option) and maximum emission rates (using the fuel analysis option). 40 CFR Section 63.7510(b) states:

For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater . . . (Emphasis added.)

Since NCGs and SOGs are process gases, and we interpret process gases to be included in the definition of a “gaseous fuel” in 40 CFR Section 63.7575 when such gases are used to fire a boiler or process heater, they must be included when establishing maximum fuel inputs (using the performance test option) and maximum emission rates (using the fuel analysis option).

Natural gas, as defined in 40 CFR Section 63.7575, is also a gaseous fuel that should be included in the analysis under 40 CFR Section 63.7510(b). However, as discussed above in Question #2, EPA expects natural gas to contain insignificant amounts of TSM, Cl, and Hg. Thus, we will allow a source to assume concentrations of TSM, Cl, and Hg in natural gas to be zero in a fuel analysis. This is not an exclusion from 40 CFR Section 63.7510(b), but rather a recognition that if the HAP content of natural gas were analyzed, the result would effectively be zero. Since we do not have the same expectation for NCGs and SOGs, they may not be excluded from the fuel analysis.

5) If multiple boilers in the same regulatory subcategory are emitting through a common stack and using the emissions averaging option, can these boilers be considered a single unit for the purpose of demonstrating compliance with emission limits?

The Agency amended 40 CFR 63.7522 to clarify this issue. See 71 FR 70651 (December 6, 2006).

6) If multiple boilers in the same regulatory subcategory are sharing a common fuel delivery system, can these boilers be considered a single unit for the purpose of demonstrating compliance with emission limits using emissions averaging?

Only existing large solid fuel fired boilers can participate in the emission averaging option. 40 CFR Section 63.7522. In addition, only existing large solid fuel

fired boilers sharing a common stack, may be treated as a single unit for the purpose of demonstrating compliance with the emission limits using emissions averaging. See 40 CFR Section 63.7522, as amended (71 FR 70651, Dec. 6, 2006).

7) What is the averaging period for determining continuous compliance with the fuel operating limits?

Subpart DDDDD does not provide an averaging period for determining continuous compliance with the fuel operating limits. See attached letter from Michael Alushin, Director, Compliance Assessment and Media Programs Division to Timothy Hunt, Senior Director, Air Quality Programs, American Forest and Paper Association, March 29, 2006.

8) Is fuel analysis required if the performance test compliance option is being used and only a single fuel is being burned?

No. As stated in the preamble to the final Subpart DDDDD rule (69 FR 55225, September 13, 2004), “Units burning only a single fuel type (not including startup fuels) do not need to determine, by fuel analysis, the fuel inlet operating limit when conducting performance tests.” The Agency has amended 40 CFR 63.7510(a) to clarify this issue. See 71 FR 70651 (December 6, 2006).

9) Is fuel usage monitoring required for a boiler that burns one (1) fuel type?

Yes. For each boiler or process heater subject to an emission limit, the owner or operator must keep records of monthly fuel usage including the type/s and amount/s used. 40 CFR Section 63.7555(d). These records are required to ensure that all fuels burned during the reporting period either would result in lower emissions of TSM, HCl, and Hg than the applicable emission limit for each pollutant (if demonstrating compliance through fuel analysis), or result in lower fuel input of TSM, Cl, and Hg than the maximum values calculated during the last performance test (if you demonstrate compliance through performance testing). 40 CFR Section 63.7540(a)(2).

10) Can facilities burning sludge in their boilers assume that they need to only characterize the Hg, Cl, and, if appropriate, TSM constituents in their sludge once (either using the fuel analysis as their sole compliance option or when utilizing a control device) as part of the initial compliance demonstration and then every 5 years thereafter?

No. The Agency can not conclude categorically that “sludge” burned in boilers or process heaters contain a homogenous mix of TSM, Cl, or Hg such that all types of “sludge” fall into a single “fuel type” as defined in 40 CFR Section 63.7575. Sludge from different processes and/or sources may contain concentrations of TSM, Cl, or Hg that vary such that an initial compliance demonstration on one type of sludge may not be sufficient to demonstrate continuous compliance when sludge from different processes and/or sources are burned.

In situations where a boiler or process heater is burning sludge from a single process or source, an owner or operator may only be required to conduct an initial performance test (and then every five years thereafter) if they can demonstrate that the sludge contains a homogeneous mix of TSM, Cl, and Hg. If the source can not demonstrate that the sludge is homogeneous then the owners or operators would have to demonstrate that the sludge burned would either result in lower emissions of TSM, Cl, and Hg than the applicable limit for each pollutant (if you demonstrate compliance through fuel analysis), or result in lower fuel input of TSM, Cl, and Hg than the maximum values calculated during the last performance test (if you demonstrate compliance through performance testing). 40 CFR Section 63.7540(a)(2).

11) Can boilers which burn exclusively “unadulterated wood” be excused from the fuel analysis requirements for Cl and Hg?

No. Subpart DDDDD does not provide an exemption from the fuel analysis requirements for boilers or process heaters that burn exclusively “unadulterated wood.”

12) Fuel Analysis Plans must be submitted to the Administrator for review and approval 60 days before the date that you intend to demonstrate compliance (40 CFR 63.7521(b)(1)). What happens if approval of the fuel analysis plan is not received in a timely manner?

Fuel analysis plans are site-specific test plans subject to the approval requirements in 40 CFR Section 63.7(c)(3) of the General Provisions. Therefore, in the absence of EPA approval, owners or operators are authorized to conduct fuel analyses 30 days after submission of the fuel analysis plan if the owner or operator follows the methods specified in Table 6 of Subpart DDDDD. EPA does not consider fuel analysis demonstrations to be performance tests, so they are not subject to any other requirements in 40 CFR Section 63.7 of the General Provisions.

13) Does the owner or operator have to wait 60 days after submitting a fuel analysis plan to start sampling if the plan is approved earlier?

No. The owner or operator may begin fuel analysis sampling as soon as the fuel analysis plan is approved by the delegated regulatory agency.

14) Will EPA be amending Subpart DDDDD to allow equivalent fuel analysis methods for Hg and TSM?

Yes. The Agency has amended Table 6 to Subpart DDDDD to reflect updated ASTM test methods. See 71 FR 70651 (December 6, 2006). In addition, the preamble to the amendments to Subpart DDDDD includes a list of test methods that EPA previously reviewed and approved for use as “alternative” methods that are considered “equivalent” for the purpose of Table 6 to Subpart DDDDD.

15) How can a facility be certain that an alternative fuel analysis method would be accepted by the Administrator in time to make decisions on whether capital improvements to emission controls need to be made?

There is no guarantee; hence, a source should submit their alternative fuel analysis method to their delegated regulatory agency as early as possible.

16) The concentrations of TSM and Hg in biomass fuels are expected to be well below the detection limits of the fuel analysis analytical methods specified in Table 6. How should non-detection measurements be reported for establishing operating limits according to 40 CFR Section 63.7530 and demonstrating compliance through fuel analysis in accordance with 40 CFR Sections 63.7505(c) and 63.7530(d)?

Owners or operators of Subpart DDDDD affected sources may treat emissions of an individual HAP as zero if all test runs result in non-detect measurement, assuming an appropriate detection limit value is used. If any test run or test sample has a measurable level, half the detection level would be used for the non-detect runs/samples. This is consistent with the requirements in Appendix A, Item 4(f).

17) Can EPA Method 5B be used to determine compliance with the PM emission limit for boilers with wet scrubbers/FGD systems?

Requests for approval of an alternative test method must be submitted to the EPA Office of Air Quality Planning and Standards.

18) EPA Method 5 calls for a filter temperature of $248 \pm 25^{\circ}\text{F}$, but allows for other temperatures if specified in an applicable NSPS or if approved by the EPA Administrator for a particular application (EPA M5, Sec. 2.0). For Boiler MACT performance testing, will EPA grant approval for use of an alternate temperature for boilers not equipped with a wet scrubber/FGD system, as permitted under the NSPS, to avoid or minimize interference from (non-metal HAP) sulfate aerosols?

Requests for approval of an alternative test method must be submitted to the EPA Office of Air Quality Planning and Standards.

19) EPA Method 5 calls for a filter temperature of $248 \pm 25^{\circ}\text{F}$, but allows for other temperatures if specified in an applicable NSPS or if approved by the EPA Administrator for a particular application (EPA M5, Sec. 2.0). If EPA approval has already been obtained for an alternative temperature at a location, is EPA approval also required for use of that temperature when using Method 5 for demonstrating boiler MACT compliance?

Requests for approval of an alternative test method must be submitted to the EPA Office of Air Quality Planning and Standards.

20) For a new liquid fuel boiler in the less than 100 x 106 Btu/hr size range, is an initial performance test required for PM and HCl? If so, can fuel analysis be used to demonstrate compliance with the HCl limit?

New or reconstructed boilers and process heaters in the large liquid fuel subcategory (with rated capacities greater than 10 mmBTU) or the limited use liquid fuel subcategory that burn only fossil fuels and other gases and do not burn any residual oil are not required to conduct performance tests to demonstrate compliance with the PM or HCl emission limits. 40 CFR Section 63.7506(a). However, new fuel fired boilers with a rated capacity above 10 mmBTU burning liquid fuels other than fossil fuels or residual oil are required to demonstrate compliance with the PM and HCl limit by performance testing. Although the Agency anticipates the use of the fuel analysis option for liquid fuel fired boilers and process heaters, an owner or operator of a liquid fuel fired boiler or process heater subject to the HCl emission limit may request the use of an alternative fuel analysis method. A request for an alternative fuel analysis method must be submitted to OAQPS for approval.

21) Some states require soot blowing during one of the performance test runs. The Boiler MACT rule does not specify this as a test requirement. Is soot blowing required during a stack test?

Yes. Soot blowing is a routine operation constituting representative process conditions. Emissions from soot-blowing cannot be discarded as being the result of an upset condition, and it would be erroneous to stop soot-blowing while stack testing. Agency guidance outlines the procedures for including soot-blowing while stack testing. The frequency with which facilities perform soot-blowing can vary significantly and the Agency guidance addresses this issue by allowing facilities to weight the soot-blowing data in the performance tests based on the frequency of the soot-blowing. See Clean Air Act National Stack Testing Guidance, September 2005, <http://www.epa.gov/compliance/resources/policies/monitoring/caa/stacktesting.pdf>.

22) 40 CFR 63.7520(d) requires performance testing to be conducted at "maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals," How should the performance test be conducted if the worst case fuel mixture may not allow the boiler to reach a "maximum normal operating load"?

The Agency recognizes that the maximum normal operating load for the mixture of fuels that have the highest content of TSM, Cl, and Hg may be less than the maximum normal operating load for other fuel mixtures. Performance tests should be conducted at the "maximum normal operating load" while burning the type of fuel or mixture of fuels that have the highest content of TSM, Cl, and Hg. 40 CFR Section 63.7520(d). The site-specific test plan submission required in 40 CFR Section 63.7520(a) should provide an explanation of why the performance test is being conducted at less than the maximum rated capacity of the boiler or process heater.

23) If the owner or operator of a source can demonstrate compliance with Subpart DDDDD without relying on a control device (e.g., using the fuel analysis option), is the source subject to the continuous monitoring system requirements established in 40 CFR Sections 63.7500, 63.7530, 63.7540, Tables 3,4,7, and 8, and Appendix A?

No. The source is not subject to the continuous monitoring system requirements if the source can demonstrate compliance using the fuel analysis method without relying on a control device. However, the source would be required to monitor fuel use as specified in Tables 3 and 4 of Subpart DDDDD.

24) Is a multi-cyclone considered an air pollution control device for the purposes of Subpart DDDDD?

Yes. Multi-cyclone collectors are generally considered to be air pollution control devices for the purpose of Subpart DDDDD. See attached letter from Michael Alushin, Director, Compliance Assessment and Media Programs Division, Office of Compliance to Timothy Hunt, Senior Director, Air Quality Programs, American Forest and Paper Association, October 14, 2005.

25) Subpart DDDDD requires that pH meters have a two-point calibration every 8-hours (40 CFR Section 63.7525(f)(3)). The repetitive 8-hour requirement is excessive for the wet scrubber liquid application and therefore is unnecessarily burdensome. Will EPA issue a technical amendment to allow alternative pH calibration plans?

EPA does not plan to propose technical amendment to Subpart DDDDD that will allow alternative pH calibration plans. However, an owner or operator of a Subpart DDDDD affected source may request approval from EPA's Office of Air Quality Standards and Planning for an alternative pH calibration method.

26) If an owner or operator chooses to use the emission averaging option, will each boiler be required to install a continuous opacity monitor (COM) and comply with the 20% opacity limit?

Subpart DDDDD requires that "... each existing solid fuel boiler participating in the emission averaging option that is equipped with a dry control system, maintain opacity at or below the applicable limit" (Emphasis added.). 40 CFR Section 63.7541(a)(2). However, Subpart DDDDD provides owners or operators of boilers controlled with fabric filters with the option of installing bag leak detection systems (BLDS) in lieu of COMS. See Table 2 and 3 of Subpart DDDDD. As a result, boilers controlled by fabric filters which are monitored with BLDS are not subject to an applicable limit for opacity. Therefore, not all boilers participating in the emission averaging option would be required to install COMS and comply with the 20% opacity limit.

27) 40 CFR Section 63.7535(c) states ". . . Boilers and process heaters that have an applicable carbon monoxide work practice standard and are required to install and operate a CEMs, may not use data recorded during periods when the boiler or

process heater is operating at less than 50% of its rated capacity." How does an owner/operator demonstrate compliance with the CO CEMS work practice standard if the boiler/process heater operates below 50% of its rated capacity?

Boilers and process heaters required to install CO CEMS must maintain records of CO emissions as required in 40 CFR Section 63.7555. However, as stated in 40 CFR Section 63.7525(a)(6), CO emissions data recorded when the boiler or process heater is operating below 50% of its rated capacity must not be used for calculating the CO data average for determining compliance with the CO work practice standard. Therefore, boilers and process heaters that always operate below 50% of their rated capacities are required to monitor and record CO emissions data but are not required to demonstrate compliance with the CO work practice standard.

28) Can a facility demonstrate on a case-by-case basis that not all chlorine found in a fuel analysis is emitted as chlorine gas?

No. Appendix A to Subpart DDDDD states that when conducting a fuel analysis to determine HAP emissions, you must assume any chlorine detected will be emitted as chlorine gas. See Appendix A, Item 4(a)(1).

29) Can an emission weighted stack height be used for the look-up tables?

Yes. Appendix A to Subpart DDDDD was amended (70 FR 76918, December 28, 2005) requiring sources to use the weighted average stack height of the Subpart DDDDD emission points. See Appendix A, Item 8(b)(1).

30) Do boilers that meet the emission limitations using the fuel analysis option need to prepare startup, shutdown, and malfunction (SSM) plans?

Yes. Neither Subpart DDDDD nor the General Provisions (Subpart A) allow for the SSM Plan to be waived. However, if a source can demonstrate compliance with all Subpart DDDDD emission limits using only the fuel analysis option, and is not required to install a CO CEMS, the SSM Plan would only need to include a statement that compliance has been demonstrated by the fuel analysis option. If a source can no longer demonstrate compliance using the fuel analysis option, the owner or operator is required to update the SSM Plan to reflect the appropriate procedures for operating and maintaining the source during a startup, shutdown, or malfunction as required in 40 CFR Section 63.6(e)(3).

31) Do SSM Plans need to address continuous monitoring system malfunctions?

A SSM Plan must address continuous monitoring system malfunctions if the malfunction results in an exceedance of an applicable emission limitation. See 40 CFR 63.6(e)(3).

32) What SSM events must be reported as deviations? There appears to be some inconsistency with the reporting of SSM events between the General Provision and the Boiler MACT Rule. Table 9 and the General Provisions are consistent.

However, 40 CFR 63.7550 (d) and (e) require that all deviations including SSM events be reported as deviations. The General Provisions SSM discussion does not address this issue.

The definition of a “deviation” includes:

. . . any instance in which an affected source subject to this subpart, or an owner of such a source fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

40 CFR Section 63.7575.

Each deviation must be reported in the compliance report as stated in 40 CFR Section 63.7550 (d) and (e) as well as in Table 9 of Subpart DDDDD. All deviations must be reported in the compliance report regardless of whether they occurred during normal operation or during a startup, shutdown, or malfunction.

33) Is a SSM Plan required for new liquid fuel boilers with capacities less than 100 x 106 Btu/hr?

Yes. A SSM Plan is required for all Subpart DDDDD affected sources except those listed in 40 CFR Section 63.7506 (b) and (c).

34) Would an existing boiler/process heater that is relocated to another facility be considered a new source?

Under Subpart DDDDD, a boiler or process heater is “new” if the owner or operator commenced construction of the boiler or process heater after January 13, 2003. 40 CFR Section 63.7490(b). The definition of construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. 40 CFR Section 63.2. Therefore, the relocation of an “existing” boiler or process heater, in and of itself, would not result in the boiler or process heater becoming a “new” source under Subpart DDDDD.

35) Would a Yankee Dryer heated with natural gas be considered a process heater?

Subpart DDDDD defines a “process heater” to mean:

. . . an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of

generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves. (Emphasis added.)

40 CFR Section 63.7575

If the combustion gases come in contact with the process materials that are being dried, the dryer would not be considered a “process heater.” However, the Agency can not categorically determine that all “Yankee Dryers” meet the definition of a “process heater.”

36) What is the definition of "rated capacity"?

The rated capacity is the same as the “manufacturer’s maximum continuous rated capacity” which should be available from the manufacturer.

37) Can we collect emissions data from a common stack or does data need to be collected individually for each boiler?

See response to Question #5.

38) The rule specifies Method 5 for particulate testing. Method 5 only requires the “front half” of the particulate catch be included. However, some states require inclusion of the back half as well. Please confirm that only the front particulate catch is required under Method 5 for the boiler MACT rule?

Only the front particulate catch is required under Method 5 for affected sources subject to Subpart DDDDD. However, owners or operators of affected sources subject to Subpart DDDDD should be aware that States may require more stringent testing.

39) AF&PA believes there are widely used and acceptable methods besides those listed in Table 6 of Subpart DDDDD. Will EPA allow sources to use other widely used and commonly acceptable methods?

Table 6 of Subpart DDDDD has been amended to include several additional test methods. See 71 FR 70651(Dec. 6, 2006). In addition, owners or operator may request approval for use of other methods on a site-specific basis under the procedures in 40 CFR Section 63.8(f).

40) How does a source demonstrate compliance with the emission averaging requirements in 40 CFR Section 63.7522(c)?

Sources demonstrate compliance with the requirement of 40 CFR Section 63.7522(c), as amended December 6, 2006 (71 FR 70651), by listing the specific control technology or pollution prevention measure to be used for each emission source in the

averaging group and the date of installation or application in the emission averaging plan as required in 40 CFR Section 63.7522(g)(2)(iii). In addition, sources must maintain documentation supporting their compliance status, which would include records demonstrating that the design, operation, and maintenance of the control equipment in place on the effective date of Subpart DDDDD (November 12, 2004) were equivalent to or less effective than the design, operation, and maintenance of the control equipment used to demonstrate compliance with the emission averaging provisions during the initial performance test. See 40 CFR Section 63.7555(a)(1).

41) Do sources that previously installed, operated, and maintained COMS according to PS-1 prior to the revisions to PS-1 (August 2000) need to recertify their COMS in order to demonstrate compliance with Subpart DDDDD?

No. Sources that installed, operated, and maintained COMS according to PS-1 prior to the August 2000 revisions would not be required to recertify under the revised PS-1 in order to demonstrate compliance with Subpart DDDDD.

42) Does a multi-cyclone collector on a wood-fired boiler (or other such combustion device) constitute a control device for Compliance Assurance Monitoring (CAM) Rule purposes?

The Agency issued an applicability determination to the American Forest and Paper Association on February 3, 2006. See attached letter from Michael Alushin, Director, Compliance Assessment and Media Programs Division to Timothy Hunt, Senior Director, Air Quality Programs, American Forest and Paper Association, February 3, 2006. In that determination, the Agency found that there may be site-specific cases in which a multi-cyclone may not be considered an air pollution control device as defined in the CAM rule. However, it should be noted that the CAM rule does not apply to standards promulgated after November 15, 1990. See 40 CFR Section 64.2(b)(1)(i). Therefore, Subpart DDDDD affected sources equipped with multi-cyclones would fall under the “any other control type” category in Tables 2 and 3 of Subpart DDDDD and would be subject to an opacity limit of 20% for existing sources and 10% for new sources.

43) What are the operating limits and monitoring requirements when the health-based compliance option is used and manganese emission rate is determined by stack testing and the total selected metals not including manganese was determined via fuel analysis?

See attached letter from Michael Alushin, Director, Compliance Assessment and Media Programs Division to Timothy Hunt, Senior Director, Air Quality Programs, American Forest and Paper Association, February 3, 2006.

44) For HCl and Mn health-based compliance alternatives (Appendix A), must all boilers comprising the affected source be tested or only the solid fuel boilers?

Appendix A, Item 4(a) requires an owner or operator to conduct HAP emission tests or fuel analysis for every emission point covered under subpart DDDDD within the affected source. However, as discussed in Questions #2 and #4, we expect natural gas to contain insignificant amounts of TSM, Cl, and Hg. Therefore, owners or operators demonstrating compliance with the health-based compliance alternative for HCl and Mn are not required to test natural gas fired boilers and process heaters. See attached letter from Michael Alushin, Director, Compliance Assessment and Media Programs Division to Marceia L. Cox, Program Manager, Environmental Support, International Paper, April 21, 2006.

45) For the HCl and Mn health based compliance alternatives (Appendix A), can fuel tests for Cl and Mn be used to establish emission rates in lieu of stack testing?

Yes. Subpart DDDDD provides owners or operators with the option to use fuel analysis to demonstrate eligibility to comply with the health based compliance alternatives . See Appendix A, Item 4(a).

46) The rule seems to require that health based compliance alternative parameters must be incorporated as Federally enforceable limits in Title V permits (item 10, Appendix A) but EPA staff has verbally advised that submittal of an eligibility demonstration and certification to the permitting authority is sufficient; which is correct?

The parameters that define the source as eligible for the health-based compliance alternative must be submitted for incorporation as Federally enforceable limits in the sources Title V permit. See Appendix A, Item 8(d). The submission of an eligibility determination meeting the requirements of Appendix A is sufficient to establish eligibility, provided the state permitting authority has not identified a deficiency in the submission. Chapter 11, Summary of Public Comments and Responses, National Emissions Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters (December 14, 2005).

47) Referring affected sources to the EPA web site for retrieval of the reference concentrations for HCl, Cl₂, and Mn is cumbersome. How would affected sources using the Health-Based Compliance Alternatives know that changes have occurred? Would those using that alternative need to revise their compliance demonstration upon future changes to IRIS?

Appendix A, Item 11, as amended December 6, 2006 (71 FR 70651), requires an owner or operator to update his/her eligibility demonstration and resubmit it each time that any of the parameters that defined the affected source as eligible for the health-based

compliance alternative, including reference values, changes in such a way that could result in increased HAP emissions or increased risk for exposure to emissions.

Changes to the reference values will be posted on the EPA website (<http://www.epa.gov/ttn/atw/toxsource/summary.html>). Although we do not anticipate changes to the reference values over the next few years, owners or operators of affected sources using the health-based compliance alternative would be required to verify that the reference values have not changed to ensure ongoing compliance as part of their annual Title V self-certification requirement.

48) Paragraph 4(b)(2) requires that the emission tests be conducted under “worst-case” operating conditions. For many sources, the composition of the fuel mixture will determine the worst-case conditions (e.g., 50 percent bituminous coal, 35% wood, and 15 percent tire derived fuel). What is the averaging time for calculating the fuel mixture?

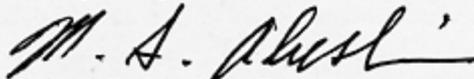
Subpart DDDDD does not provide an averaging period for determining continuous compliance with the fuel operating limits. See attached letter from Michael Alushin, Director, Compliance Assessment and Media Programs Division to Timothy Hunt, Senior Director, Air Quality Programs, American Forest and Paper Association, March 29, 2006.

49) Boilers or process heaters at wood products mills that exhaust flue gases to a direct contact dryer system most of the time, but bypass the dryer when it is not operating, could be covered by both the Boiler and PCWP MACTS. According to the PCWP MACT, when the boiler is venting through the dryer the boiler would be covered by the PCWP MACT. However, when bypassing the dryer the boiler could be subject to the boiler MACT. Dryers are bypassed for short periods of time. During the periods when the dryer is being bypassed, can the boiler be considered to be in the limited use subcategory?

A boiler or process heater is considered to be limited use if the annual average capacity factor is equal to or less than 10 percent. 40 CFR Section 63.7575. Boilers or process heaters at wood product mills that have an annual average capacity factor greater than 10 percent are subject to Subpart DDDDD regardless of the percentage of time the exhaust gases bypass the dryers.

These responses have been coordinated with the Office of Air Quality Planning and Standards and the Office of General Counsel. If you have any additional questions, please contact Gregory Fried of my staff at (202) 564-7016 or fried.gregory@epa.gov.

Very Truly Yours,



Michael S. Alushin, Director

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Brian Doster, Office of General Counsel
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Attachments