#### **HEARING REPORT**

Prepared Pursuant to Section 4-168(d) of the Connecticut General Statutes and Section 22a-3a-3(d)(5) of the Department of Environmental Protection Rules of Practice

Regarding Amendment of Sections 22a-174-4 and 22a-174-7 of the Regulations of Connecticut State Agencies

Hearing Officer: Merrily A. Gere

Date of Hearing: October 23, 2002

On August 30, 2002, the Commissioner of the Department of Environmental Protection ("Department") signed a notice of intent to propose two amendments to the Regulations of Connecticut State Agencies ("R.C.S.A."): section 22a-174-4 concerning source monitoring, record keeping and reporting and R.C.S.A. section 22a-174-7 concerning air pollution control equipment and monitoring equipment operation. Pursuant to such notice, a public hearing was held on October 23, 2002. The public comment period for the proposed amendments closed on October 25, 2002.

# I. Hearing Report Content

As required by section 4-168(d) of the Connecticut General Statutes ("C.G.S."), this report describes the amendments as proposed for hearing; the principal reasons in support of the Department's proposed amendments; the principal considerations presented in oral and written comments in opposition to the Department's proposed amendments; all comments and responses thereto on the proposed amendments; and the final wording of the proposed amendments. Commenters are identified in Attachment 1.

This report also includes a statement in accordance with C.G.S. section 22a-6(h).

#### II. Compliance with Section 22a-6(h) of the General Statutes

Section 22a-6(h) of the C.G.S. requires the Commissioner of the Department to distinguish clearly, at the time of public hearing, all provisions of a proposed regulation or amendment thereto that differ from adopted federal standards and procedures, provided: (1) such proposed amendment pertains to activities addressed by adopted federal standards and procedures; and (2) such adopted federal standards and procedures apply to persons subject to the provisions of such proposed amendment. In addition, the Commissioner must provide an explanation for all such provisions in the regulation-making record required under Title 4, Chapter 54 of the Connecticut General Statutes.

In accordance with the requirements of C.G.S. section 22a-6(h), the Hearing Officer made a

written statement available at the public hearing. Such statement, incorporated into the administrative record for this matter, indicated that the requirements of C.G.S. section 22a-6(h) do not apply to the provisions of the proposed amendments for one of the following two reasons: (1) there are no applicable federal standards or procedures; or (2) there are applicable federal standards or procedures are adopted without change.

The proposed amendment to R.C.S.A. section 22a-174-4 ("Section 4") clarifies and updates the Department's general requirements for continuous emissions monitoring ("CEM") equipment. The federal government requires states to have legally enforceable measures in the state implementation plan for air quality that require stationary sources subject to emission standards to install and properly operate CEM equipment. *See* 40 CFR 51. However, the revisions in proposed Section 4 do not differ from these general federal requirements on the state. In the case of the data availability, quality assurance for opacity CEM equipment and monitoring plan requirements, proposed Section 4 does not add any requirements for which the federal government has adopted standards or procedures. In the case of quality assurance for gaseous CEM equipment, the federal government has adopted standards and procedures in 40 CFR 60, Appendix F, and the amendment requires sources to meet these federal standards.

The proposed amendment to R.C.S.A. section 22a-174-7 ("Section 7") eliminates provisions redundant to other sections of the Department's regulations; clarifies air pollution control and monitoring equipment operation in conjunction with the amendment to Section 4; and clarifies the notification requirements for breakdown, failure or deliberate shutdown of air pollution control and monitoring equipment. To the extent EPA has requirements applicable to the subject matter of proposed Section 7, EPA directs the state to address the general operation of control and monitoring equipment in the state's implementation plan for air quality. *See* 40 CFR 51.

#### III. Summary and Text of the Amendments as Proposed

The amendment to Section 4 focuses the section on the Department's requirements for operation of continuous emissions monitoring equipment by removing general monitoring equipment operating requirements and incorporating them into the corresponding amendment to Section 7. The amendment updates the continuous emissions monitoring equipment requirements to current federal requirements, incorporates relevant portions of the Department's Continuous Emission Monitoring Guideline and revises language for improved clarity as well as consistency with current Department and Legislative Commissioner's Office practices.

The amendment to Section 7 clarifies notification, reporting and compliance requirements for operation of air pollution control equipment and monitoring equipment in conjunction with the amendment of Section 4. By removing requirements that are redundant of sections 22a-174-12 and 22a-174-38 of the R.C.S.A., the amendment also streamlines environmental regulation. Revision is also included for consistency with current Department and Legislative Commissioner's Office practices.

The text of the amendments as proposed is located in Attachment 2 to this report.

#### IV. Principal Reasons in Support of the Proposed Amendments

The amendment to Section 4 focuses the section on the operation of continuous emissions monitoring ("CEM") equipment and removes general monitoring equipment requirements. The amendment also updates requirements for continuous emissions monitoring equipment operation based on current federal requirements and the Department's Continuous Emission Monitoring Guidelines. Through such changes, the ability of the regulated community to understand and comply with Section 4 will be improved.

The amendment to Section 7 streamlines environmental regulation by eliminating requirements that are redundant sections 22a-174-12 and 22a-174-38 of the R.C.S.A.; and clarifies requirements for air pollution control equipment and monitoring equipment in conjunction with a corresponding amendment to section 22a-174-4. The amendment also clarifies the notification, reporting and compliance requirements of the section.

# V. Principal Considerations in Opposition to the Proposed Amendments

While comments were submitted recommending technical changes to the proposed amendments, no comments were submitted in opposition to moving the amendments forward for approval and promulgation.

All comments submitted, both in opposition and support, are addressed in detail in Section VI of this report.

#### VI. Summary of Comments

In general, comments submitted were thoughtful, detailed and constructive. After considering these comments, the Department made changes, set out in detail in this section of this report, that improve the proposed amendments. The Department thanks commenters for the time and attention to drafting submitted comments. The Department credits the high quality of the comments to result in large part from the dedicated participation by many of the commenters in a working group organized under the Bureau of Air Management's State Implementation Plan Revision Advisory Committee ("SIPRAC"). Over a period of approximately five years, members of this working group attended monthly meetings in Hartford and reviewed numerous drafts of the proposed amendments. These working group members gained an understanding of the Department's air quality goals and objectives, and the Department staff gained an understanding of how these goals could be achieved in a manner that takes into account, in certain respects, needs of regulated source owners and operators.

Substantive comments on the amendment of Section 4 were focused on three topics: the performance specifications and quality assurance requirements, particularly for sources subject to federal requirements; minimum data availability, with comments supporting both increasing and decreasing the proposed availability requirements; and the application of the amendment of Section 4 to municipal waste combustors ("MWCs").

Substantive comments on the amendment of Section 7 focused on the statement of an owner or operator's obligation to comply with all applicable emission limits and standards regardless of filing of notice under Section 7; the application of Section 7's requirements to sources participating in emissions credit trading programs; and the application of the amendment to

#### MWCs.

All comments submitted are summarized below with the Department's responses, organized in three categories consisting of general comment, comment specific to Section 4 and comment specific to Section 7. Location and topic organize the comments in the sections of this report specific to Section 4 and Section 7. Commenters are identified by abbreviation in this section of this report and are identified fully in Attachment 1 to this report. When changes to proposed text are indicated in response to comment, new text is in bold font and deleted text is in strikethrough font.

#### A. GENERAL COMMENT

**Comment:** Several commenters support the Department's commitment to amend Sections 4 and 7. Appreciation is expressed for the Department's effort to involve the regulated community in the process of developing the amendments. (BRRFOC, CRRA, Wisvest)

**Response:** The Department appreciates BRRFOC, Wisvest and CRRA's support for the amendment process and thanks these commenters as well as others in the regulated community for their dedication to the lengthy development of the proposed amendments and the SIPRAC working group described earlier in this report. Through the SIPRAC working group as well as this hearing process, the Department believes it has arrived at amendments that both meet the Department's goal of maintaining and improving the quality of Connecticut's environment in a manner that takes into account, when possible, the business practices of the regulated community.

#### B. AMENDMENT OF SECTION 4

#### General comments

**1. Comment:** EPA recommends adding a note at the beginning of the section stating that facilities subject to CEM requirements under federal rules must comply with the federal quality assurance/quality control, data availability and reporting standards found in the relevant federal rule and must not rely solely on the requirements in Section 4.

**Response:** Any source subject to both state and federal requirements for the same activity must comply with all applicable state and federal requirements. Such is the case in Section 4. However, the text of an adopted regulation stands alone, having undergone an extensive review process in order to arrive at clearly written requirements that will be interpreted consistently throughout the lifetime of the regulation. This hearing report and other supporting documentation required by statute serve as guidance regarding the intent of the regulatory amendment. The revision of the proposed amendment described in the response to Comment 12 also addresses the concern expressed by EPA.

**2. Comment:** Since the proposed amendment includes standards that apply on a quarterly basis, Section 4 should specify an effective date at the beginning of a calendar quarter, *i.e.*, January 1, 2003 or April 1, 2003. (NRG)

**Response:** In the support documents accompanying the submission of this amendment to the Legislative Regulations Review Committee, the Department should specify an effective date at the beginning of a calendar quarter, October 1, 2003 or January 1, 2004, depending on the date of submission.

#### Subsection (b), opacity CEM

**3. Comment:** If it is the Department's intention, subsection (b)(1) should state clearly that it applies to stationary sources, not mobile sources, by adding the word "stationary" prior to "sources." (CBIA, BRRFOC)

**Response:** The Department should revise subsection (b)(1) to state clearly its application to stationary, not mobile, sources as follows:

- (1) [Effective on January 1, 1976] <u>EXCEPT AS PROVIDED IN SUBDIVISIONS</u> (2) AND (3) OF THIS SUBSECTION, the owner or ["]operator["] of [any of] the [following "] **STATIONARY** sources["] LISTED IN SUBPARAGRAPHS (A) THROUGH (D) OF THIS SUBDIVISION shall install[, maintain and operate a smoke and "opacity" monitor approved] OPACITY <u>CEM</u> EQUIPMENT....
- **4. Comment:** The reference to process equipment operated "in combination with pollution control equipment" in subsection (b)(1)(D) is unclear. If the intent is to require opacity CEM for process sources with more than 25 pounds per hour after application of control equipment, then the existing language, "after application of control equipment," should not be deleted as this existing language is clearer. (CBIA)

**Response:** The Department should revise subsection (b)(1)(D) to improve clarity, as follows:

- (D) [A "process source" that will emit in excess of] ANY PROCESS SOURCE WITH PARTICULATE MATTER EMISSIONS EXCEEDING twenty-five [(25)] pounds per hour (25 LBS/HR) [of "particulate matter" as determined] after the application of control equipment,} when operated at ["]maximum rated capacity.["] IN COMBINATION WITH POLLUTION CONTROL EQUIPMENT.
- **5. Comment:** CRRA supports subsection (b)(3) as proposed. Connecticut's tight electricity supply situation requires the use of standby fuel burning equipment to generate electricity during short-lived but crucial periods, particularly during warm weather. A requirement for the installation of opacity CEM equipment on such units is not economically feasible. Further, it is sensible to exclude from such a unit's allowed operating hours those periods when the unit is operated for emissions testing or solely to maintain reliability.

**Response:** The Department appreciates the support of CRRA for the requirements of subsection (b)(3).

**6. Comment:** Wisvest suggests that the 14-day limit on a source owner or operator to provide requested documentation to the Commissioner in subsection (b)(4) is inconsistent with time limits in other regulations and should be increased to 30 days.

**Response:** The Department should change the 14-day submission limit to 30 days in subsection (b)(4), as follows:

- (4) THE COMMISSIONER MAY, IN WRITING, REQUEST WRITTEN DOCUMENTATION FROM THE OWNER OR OPERATOR OF EQUIPMENT LISTED IN SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION TO ASCERTAIN THE APPLICABILITY OF SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION. AN OWNER OR OPERATOR SHALL DELIVER SUCH DOCUMENTATION TO THE COMMISSIONER WITHIN FOURTEEN (14) THIRTY (30) DAYS OF RECEIPT OF SUCH A WRITTEN REQUEST.
- **7. Comment:** Proposed subsections (b)(5) and (b)(6) should be moved to subsection (e). Subsections (b)(5) and (b)(6) are specific to a source for which the Commissioner, having first exempted the source as provided in subsection (e) from meeting the monitoring requirements of chapter 446c of the Connecticut General Statutes, now revokes that exemption due to the existence of certain conditions. In moving the requirements of subdivisions (5) and (6) to subsection (e), subparagraphs (B) and (D) of subdivision (5) should be deleted. (DOD)

**Response:** The Department should revise subsections (b) and (e) as follows: (1) delete subdivisions (5) and (6) from subsection (b); (2) revise and renumber proposed subdivisions (7) and (8) of subsection (b); and (3) incorporate the content of subdivisions (5)(A), (5)(C), (5)(E) and (6) of subsection (b) into subsection (e) and a new subsection (f), as follows:

(b) [Smoke and "Opacity" Monitoring.] <u>OPACITY CONTINUOUS EMISSIONS MONITORING (CEM).</u>

. . . . .

- [(b)(5) The "commissioner" may revoke or "modify" an exemption under subsections (a)(3), (b)(2)(ii) and (iii), (b)(3) and (b)(4) if it is determined that repeated violations of subsection 22a-174-18(a) or violations of any specific applicable conditions in these exemptions have occurred or if it is determined that operation of the "source" will prevent or interfere with the "attainment" or maintenance of applicable "ambient air quality standards," create a health hazard or create a nuisance.] GIVE NOTICE TO AN OWNER OR OPERATOR OF A SOURCE WITH AN APPROVAL UNDER SUBSECTION (e) OF THIS SECTION THAT INSTALLATION, OPERATION AND MAINTENANCE OF CEM EQUIPMENT OR SUCH OTHER MONITORING OR INTERMITTENT STACK TESTING AS ALLOWED BY THIS SECTION IS REQUIRED IF THE COMMISSIONER FINDS:
  - (A) REPEATED NONCOMPLIANCE WITH SECTION 22a-174-18 OF THE

- REGULATIONS OF CONNECTICUT STATE AGENCIES HAS OCCURRED:
- (B) NONCOMPLIANCE WITH THE REQUIREMENTS, LIMITATIONS OR RESTRICTIONS SET FORTH IN SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION HAS OCCURRED:
- (C) OPERATION OF THE SUBJECT SOURCE HAS INTERFERED WITH OR IS LIKELY TO INTERFERE WITH THE ATTAINMENT OR MAINTENANCE OF AMBIENT AIR QUALITY STANDARDS, CREATE A HEALTH HAZARD OR CREATE A NUISANCE:
- (D) MONITORING EQUIPMENT IS NEEDED TO DETERMINE COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER: OR
- (E) THE SOURCE HAS BEEN ALTERED OR THE OPERATIONS OF THE SOURCE HAVE CHANGED SUCH THAT SUBSECTION (e) IS NO LONGER APPLICABLE.
- (6) THE NOTICE PROVIDED FOR IN SUBDIVISION (5) OF THIS SUBSECTION SHALL BE IN THE FORM OF A PERMIT OR ORDER AND SHALL SPECIFY REQUIREMENTS FOR INSTALLATION AND OPERATION OR OTHER MONITORING INCLUDING A DAY BY WHICH SUCH INSTALLATION AND OPERATION OR OTHER MONITORING IS TO COMMENCE.
- (5) AN OWNER OR OPERATOR THAT CLAIMS SUBDIVISION (b)(1) OF THIS SECTION IS NOT APPLICABLE BY VIRTUE OF COMPLIANCE WITH SUBDIVISIONS (b)(2) OR (b)(3) OF THIS SECTION SHALL, UPON NOTICE FROM THE COMMISSIONER, INSTALL, OPERATE AND MAINTAIN CEM EQUIPMENT OR CONDUCT OTHER MONITORING OR INTERMITTENT STACK TESTING AS ALLOWED BY THIS SECTION, AND COMPLY WITH SUBSECTIONS (c) AND (d) OF THIS SECTION, IF THE COMMISSIONER FINDS:
  - (A) REPEATED NONCOMPLIANCE WITH SECTION 22a-174-18 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES HAS OCCURRED;
  - (B) NONCOMPLIANCE WITH THE REQUIREMENTS, LIMITATIONS OR RESTRICTIONS SET FORTH IN SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION HAS OCCURRED;
  - (C) OPERATION OF THE SUBJECT SOURCE HAS INTERFERED WITH

- OR IS LIKELY TO INTERFERE WITH THE ATTAINMENT OR MAINTENANCE OF AMBIENT AIR QUALITY STANDARDS, CREATE A HEALTH HAZARD OR CREATE A NUISANCE; OR
- (D) MONITORING EQUIPMENT IS NEEDED TO DETERMINE COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER.
- (6) THE NOTICE PROVIDED FOR IN SUBDIVISION (b)(7)-(5) OF THIS SECTION SHALL BE IN THE FORM OF A PERMIT OR ORDER AND SHALL SPECIFY REQUIREMENTS FOR INSTALLATION AND OPERATION OR OTHER MONITORING INCLUDING A DAY BY WHICH SUCH INSTALLATION AND OPERATION OR OTHER MONITORING IS TO COMMENCE.

. . . .

- (e) THE COMMISSIONER MAY EXEMPT AN OWNER OR OPERATOR OF A SOURCE SUBJECT TO THIS SECTION FROM THE REQUIREMENTS OF THIS SECTION IF SUCH OWNER OR OPERATOR DEMONSTRATES IN WRITING, FOR THE COMMISSIONER'S WRITTEN APPROVAL, THAT SUCH SOURCE IS PHYSICALLY INCAPABLE OF VIOLATING ANY APPLICABLE REQUIREMENT SET FORTH IN CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER.
- (f) UPON WRITTEN NOTICE IN THE FORM OF A PERMIT OR ORDER TO AN OWNER OR OPERATOR OF A SOURCE GRANTED AN EXEMPTION UNDER SUBSECTION (e) OF THIS SECTION, SUCH OWNER OR OPERATOR SHALL INSTALL, OPERATE AND MAINTAIN CEM EQUIPMENT IN ACCORDANCE WITH SUCH NOTICE IF:
- (1) THE COMMISSIONER DETERMINES THERE IS REPEATED NONCOMPLIANCE WITH SECTION 22a-174-18 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES;
- (2) OPERATION OF THE SUBJECT SOURCE HAS INTERFERED WITH OR IS LIKELY TO INTERFERE WITH THE ATTAINMENT OR MAINTENANCE OF AMBIENT AIR QUALITY STANDARDS, CREATE A HEALTH HAZARD OR CREATE A NUISANCE; OR
- (3) THE SOURCE HAS BEEN ALTERED OR THE OPERATIONS OF THE SOURCE HAVE CHANGED SUCH THAT SUBSECTION (e) OF THIS SECTION IS NO LONGER APPLICABLE.
- **8. Comment:** Subsections (b)(5)(D) and (b)(7)(D) provide the Commissioner with the authority

to require a source owner or operator to install and operate CEM equipment if, among other reasons, such CEM equipment is "needed to determine compliance with chapter 446c of the Connecticut General Statutes . . ." Technological and economic feasibility should be added to these subparagraphs as additional factors the Commissioner will consider before requiring the installation of CEM equipment. (CBIA)

**Response:** The Department should delete subsection (b)(5)(D) as explained in the response to Comment 7 and revise proposed subsection (b)(7)(D) in response to this comment as follows:

- (D) MONITORING EQUIPMENT IS **TECHNICALLY FEASIBLE**, **ECONOMICALLY FEASIBLE AND** NEEDED TO DETERMINE

  COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL

  STATUTES AND REGULATIONS PROMULGATED THEREUNDER: OR
- **9. Comment:** Subdivisions (7) and (8) of subsection (b) should be revised to state clearly whether these subdivisions apply only to opacity CEM equipment, the installation of which is required by subdivision (1), or to other forms of emissions monitoring. Subdivisions (2) and (3) apply to sources that are exempt from the requirement to install opacity CEM equipment under subdivision (1). Subdivisions (7) and (8) invalidate a source's operation under the exemptions provided by subdivisions (2) and (3) and require such source owner or operator to install monitoring equipment. Therefore, subdivisions (7) and (8) should require installation of opacity CEM equipment, not other monitoring or intermittent stack testing. (DOD)

**Response:** The Department agrees that subdivisions (7) and (8) should be limited to opacity CEM equipment. Should the Commissioner determine that a source requires monitoring by gaseous CEM, opacity CEM or any other method, authority to require such monitoring is provided in subdivisions (1) and (2) of subsection (c).

Subdivisions (7) and (8) of subsection (b) should be revised in response to this comment and renumbered as subdivisions (5) and (6) as indicated in the response to Comment 7, as follows:

(7)(5) AN OWNER OR OPERATOR THAT CLAIMS SUBSECTION (b)(1) **OF THIS SECTION** IS NOT APPLICABLE BY VIRTUE OF

COMPLIANCE WITH SUBSECTIONS (b)(2) OR (b)(3) **OF THIS SECTION** SHALL, UPON NOTICE FROM THE COMMISSIONER,

INSTALL, OPERATE AND MAINTAIN **OPACITY** CEM EQUIPMENT

OR CONDUCT OTHER MONITORING OR INTERMITTENT STACK

TESTING AS ALLOWED BY ACCORDING TO THIS SECTION, AND

COMPLY WITH SUBSECTIONS (c) AND (d) OF THIS SECTION, IF

THE COMMISSIONER FINDS:

. . . . .

(8)(6) THE NOTICE PROVIDED FOR IN SUBSECTION (b)(7)(5) OF THIS

SECTION SHALL BE IN THE FORM OF A PERMIT OR ORDER AND SHALL SPECIFY REQUIREMENTS FOR **OPACITY CEM EQUIPMENT** INSTALLATION AND OPERATION <del>OR OTHER</del> **MONITORING** INCLUDING A DAY BY WHICH SUCH INSTALLATION AND OPERATION <del>OR OTHER MONITORING</del> IS TO COMMENCE.

#### Subsection (c)(1)

- **10. Comment:** Several commenters noted concerns with the proposed language of (c)(1):
- The phrase "in his or her sole discretion" is not reasonable since a reviewing court would subject a decision by the Commissioner to require installation of CEM equipment at a source to an arbitrary and capricious standard. (CBIA)
- The language appears to give the Department unilateral authority to require a source owner or operator to meet a new CEM requirement without formal regulatory due process. Sources to which recent regulations or regulatory amendments and permits with monitoring, reporting and recordkeeping requirements apply should not have additional requirements imposed under subsection (c)(1) unless such a change is implemented through the existing regulatory or permitting process. Subdivision (1) appears to allow a circumvention of such a process. (Am. Ref-Fuel, Wheelabrator, Covanta) The Department should explain how and why additional monitoring is required. (Covanta) Am. Ref-Fuel suggests the following alternative language:
  - (1) IF THE COMMISSIONER, IN HIS OR HER SOLE DISCRETION, DETERMINES THAT OPACITY OR GASEOUS CEM EQUIPMENT IS REASONABLY AVAILABLE FROM A TECHNICAL AND ECONOMIC PERSPECTIVE FOR A SOURCE OF AIR POLLUTION, AND THAT SUCH MONITORING EQUIPMENT IS NECESSARY FOR THE DEPARTMENT TO OBTAIN OPACITY OR EMISSION DATA, THE COMMISSIONER MAY REQUIRE, BY WRITTEN NOTICE TO THE OWNER OR OPERATOR OF SUCH SOURCE, THE INSTALLATION AND OPERATION OF CEM EQUIPMENT. SUCH WRITTEN NOTICE SHALL BE IN THE FORM OF A PERMIT OR ORDER MODIFY THE SOURCE'S PERMIT PURSUANT TO C.G.S. 22a-174c AND SHALL INCLUDE REQUIREMENTS FOR INSTALLATION AND OPERATION INCLUDING A DAY BY WHICH SUCH INSTALLATION AND OPERATION IS TO COMMENCE.
- The phrase "reasonably available" should be described with specific criteria that the Department would apply to determine if CEM equipment is "reasonably available." (Covanta, Wheelabrator) Such criteria should include: final promulgation of source-specific EPA performance specifications; source-specific demonstrated commercial availability, where three or more vendors offer the CEM equipment to provide a source with cost effective choices and the ability to evaluate the best technical vendor; and source-specific demonstrated commercial viability where vendors have evaluated and addressed source-specific monitoring difficulties. Criteria must be source-specific since CEM equipment that performs well on one type of source may not perform as well on another source. For example, equipment that performs well on a gas fired combustion turbine could not be

- expected to achieve similar performance on a MWC. (Wheelabrator)
- The phrase "necessary for the Department to obtain opacity or emission data" should be described with a procedure for making the determination of necessity. (DOD, Wheelabrator) Such a procedure at a minimum should include: evaluating the objective of obtaining emissions data, *i.e.*, is emissions data necessary for direct compliance monitoring, emission characterization or emission inventory purposes; reviewing source operating history where current process parameter monitoring may indicate a need for actual emissions monitoring; and evaluating if process monitoring can be used as a surrogate for emissions in lieu of installing new CEM equipment. (Wheelabrator)
- In locations other than proposed subsection (c)(1) in the proposed amendment to Section 4, such as subsections (c)(2), (d)(1) and (e), the need for emissions monitoring is linked to that necessary to verify, determine or evaluate "compliance with Chapter 446c of the Connecticut General Statutes and regulations promulgated thereunder." Use of similar language would improve the clarity of subsection (c)(1). (DOD)
- If providing DEP sole discretion to require additional monitoring, reporting and recordkeeping requirements is intended to help implement Title V periodic monitoring or compliance assurance monitoring ("CAM") this intent should be stated. Further, the qualifications to periodic monitoring under 40 CFR 70.6(a)(3)(i) and CAM exemptions under 40 CFR 64.2(b) should be provided. These qualifications and exemptions are based on EPA's presumption that standards developed to implement the 1990 Clean Air Act amendments already contain monitoring, reporting and recordkeeping provisions that meet the Title V periodic monitoring and CAM requirements as is the case for the R.C.S.A. section 22a-174-38. (Wheelabrator)

**Response:** Commenters express concern that subsection (c)(1) will be used by the Commissioner to authorize the imposition of new CEM requirements on a source currently subject to CEM requirements, circumventing normal, required regulatory procedures. This is not the intended purpose of subsection (c)(1).

Subsection (c)(1) is a revision in form but not substance of existing subsection (a)(2). Proposed subsection (c)(1) addresses the installation of opacity or gaseous CEM equipment at a source that does not have such equipment and to which a source-specific regulation requiring CEM equipment does not apply. Such a source owner or operator may, but may not, have obtained a permit for such a source from the Commissioner. The Commissioner's judgement of whether or not CEM equipment is available for installation at a source under current subsection (a)(2) balances many considerations specific to the source and the circumstances. Such considerations include cost, equipment availability, number of vendors offering the equipment, length of time such equipment has been available, extent of use in the source category and necessity in relation to air quality concerns. The same considerations will be used to judge CEM availability under new subsection (c)(1). Furthermore, the installation and operation of CEM equipment under new subsection (c)(1) will be performed under the regulations as they exist at that time, and all required process would be followed to issue a new permit or modify an existing permit, as stated in proposed subsection (c)(1).

Furthermore, in response to Wheelabrator's comment questioning whether or not subsection

(c)(1) is intended to help implement Title V periodic monitoring or CAM, the answer is no. Subsection (c) addresses general operation and performance requirements for all sources with CEM, not qualifications and exemptions specific to particular source technologies.

However, the Department agrees with the commenters that the language of subsection (c)(1) could be revised in some aspects to state more clearly the intended purpose. For example, the phrase "in the Commissioner's sole discretion" is not necessary to modify the Commissioner's authority to require CEM equipment installation at a source and should be deleted from subsection (c)(1). The Department should revise subsection (c)(1) to make this change and others in response to comment, as follows:

- IF, FOR A SOURCE OF AIR POLLUTION, THE COMMISSIONER, IN HIS OR HER SOLE DISCRETION, DETERMINES THAT OPACITY OR GASEOUS CEM EQUIPMENT IS REASONABLY AVAILABLE, TECHNICALLY FEASIBLE, ECONOMICALLY FEASIBLE AND NECESSARY FOR THE DEPARTMENT TO OBTAIN OPACITY OR EMISSION DATA TO EVALUATE COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER FOR A SOURCE OF AIR POLLUTION. AND THAT SUCH MONITORING EQUIPMENT IS NECESSARY FOR THE DEPARTMENT TO OBTAIN OPACITY OR EMISSION DATA, THE COMMISSIONER MAY REQUIRE, BY WRITTEN NOTICE TO THE OWNER OR OPERATOR OF SUCH SOURCE, THE INSTALLATION AND OPERATION OF CEM EQUIPMENT. SUCH WRITTEN NOTICE SHALL BE IN THE FORM OF A **REGULATION**, PERMIT OR ORDER AND SHALL INCLUDE REQUIREMENTS FOR INSTALLATION AND OPERATION INCLUDING A DAY BY WHICH SUCH INSTALLATION AND OPERATION IS TO COMMENCE.
- **11. Comment:** R&C suggests that proposed section (c)(1) should be revised to exempt from Section 4 those sources for which EPA has adopted CEM requirements, particularly sources under MACT standards. R&C suggests the Department add the following text to the end of (c)(1):

NOTWITHSTANDING THE FOREGOING, THIS SUBSECTION SHALL NOT APPLY TO A SOURCE OF AIR POLLUTION THAT IS REQUIRED TO INSTALL AND OPERATE CEM EQUIPMENT PURSUANT TO

- (A) 40 CFR PART 60, 61, 63 OR 72 OR OTHER REGULATIONS ADOPTED THE U.S. ENVIRONMENTAL PROTECTION AGENCY; OR
- (B) A PERMIT, ORDER OR REGULATION ISSUED OR ADOPTED BY THE COMMISSIONER.

Alternatively, R&C suggests that sources for which EPA has adopted CEM requirements should be exempt from particular requirements in Section 4 such as data availability.

**Response:** As stated in response to Comment 10, Section 4 includes general requirements for operation and performance of all CEM equipment. These general requirements apply in addition to federal CEM requirements. The revision suggested by R&C is too broad, exempting many, if not most, regulated owners and operators from Section 4. The Department should revise Section 4 as recommended in response to Comment 12 as that revision is partially responsive to the concern expressed here yet appropriately limits the federal requirements that allow for exemption from Section 4.

### Subsection (c)(4)

**12. Comment:** Subsection (c)(4) states that gaseous CEM equipment must meet the quality assurance requirements of 40 CFR 60 Appendix F. For sources that are required to have CEM equipment under the Acid Rain and/or oxides of nitrogen ("NOx") Budget programs, the correct reference should be to 40 CFR 75. The subsection should modified to read "... the quality assurance requirements of 40 CFR 75 or Appendix F of 40 CFR 60, as applicable." (NRG)

**Response:** While Section 4 addresses general CEM equipment operation and performance, the Department agrees that Section 4's implementation is improved by recognizing the quality assurance requirements in both 40 CFR 60 and 40 CFR 75 for sources subject to NOx Budget programs or Title IV of the Clean Air Act. In order to make this change, proposed subsections (c)(4) and (c)(5) should be replaced with a single subdivision, indicated following this paragraph. In addition, in combining proposed subsections (c)(4) and (c)(5) to recognize sources subject to 40 CFR 75, proposed subsection (c)(5)(B)(v) should be revised to recognize EPA's plan to promulgate new performance audit procedures for opacity monitors:

- (4) PERFORMANCE SPECIFICATIONS. THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN OPACITY CEM EQUIPMENT PURSUANT TO SUBSECTION (b) OF THIS SECTION OR GASEOUS OR OPACITY CEM EQUIPMENT PURSUANT TO SUBDIVISION (1) OF THIS SUBSECTION, PERMIT OR ORDER SHALL MEET THE APPLICABLE PERFORMANCE SPECIFICATIONS OF 40 CFR 60, APPENDIX B.
- (5) QUALITY ASSURANCE.
  - (A) THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN GASEOUS CEM EQUIPMENT PURSUANT TO SUBDIVISION (1) OF THIS SUBSECTION, PERMIT OR ORDER SHALL MEET THE QUALITY ASSURANCE REQUIREMENTS OF APPENDIX F OF 40 CFR 60.
- (4) PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE REQUIREMENTS. THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN CEM

EQUIPMENT PURSUANT TO THIS SECTION SHALL MEET THE FOLLOWING PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE REQUIREMENTS:

- (A) THE APPLICABLE PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE REQUIREMENTS OF 40 CFR 60 APPENDICES B AND F, UNLESS THE SOURCE IS SUBJECT TO 40 CFR 75, IN WHICH CASE THE OWNER OR OPERATOR SHALL MEET THE APPLICABLE PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE REQUIREMENTS OF 40 CFR 75;
- (B) THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN FOR OPACITY CEM EQUIPMENT, PURSUANT TO SUBSECTION (b) OF THIS SECTION, SUBDIVISION (1) OF THIS SUBSECTION, PERMIT OR ORDER SHALL MEET THE FOLLOWING QUALITY ASSURANCE REQUIREMENTS WITH RESPECT TO QUALITY ASSURANCE:
  - (i) CALIBRATION SHALL BE ADJUSTED WHENEVER THE DAILY ZERO OR UPSCALE CALIBRATION EXCEEDS PLUS/MINUS TWO PERCENT (±2%) OPACITY,
  - DATA SHALL BE INVALID FOR CALCULATING DATA (ii) AVAILABILITY IN ACCORDANCE WITH SUBDIVISION (6) (5) OF THIS SUBSECTION IF THE ZERO OR UPSCALE CALIBRATION VALUE EXCEEDS EITHER THE REFERENCE ZERO OR THE UPSCALE CALIBRATION VALUE RECORDED DURING THE MOST RECENT CLEAR-PATH CALIBRATION BY PLUS/MINUS TWO PERCENT (±2%) OPACITY FOR FIVE (5) CONSECUTIVE DAYS OR PLUS/MINUS FIVE PERCENT (±5%) OPACITY ON ANY SINGLE DAY. THE PERIOD OF INVALID DATA BEGINS WITH EITHER THE FIFTH CONSECUTIVE OCCURRENCE OF A DRIFT VALUE EXCEEDING PLUS/MINUS TWO PERCENT (±2%) OPACITY OR WITH THE LAST DAILY CHECK PRECEDING THE SINGLE OCCURRENCE OF A DRIFT VALUE EXCEEDING PLUS/MINUS FIVE PERCENT (±5%) OPACITY. THE PERIOD OF INVALID DATA SHALL END WHEN A CALIBRATION DRIFT CHECK, CONDUCTED AFTER CORRECTIVE ACTION, DEMONSTRATES THAT RELIABLE MONITORING DATA IS BEING GENERATED,
  - (iii) QUALITY ASSURANCE AUDITS SHALL BE CONDUCTED DURING EACH CALENDAR QUARTER IN WHICH THE

#### SOURCE OPERATES,

- (iv) THE COMMISSIONER SHALL BE NOTIFIED, IN WRITING, NO FEWER THAN THIRTY (30) DAYS PRIOR TO THE INITIALLY PROPOSED QUALITY ASSURANCE AUDIT, AND
- **OUALITY ASSURANCE AUDITS SHALL BE CONDUCTED IN** (v) ACCORDANCE WITH THE PROCEDURES CONTAINED IN "PERFORMANCE AUDIT PROCEDURES FOR OPACITY MONITORS," EPA DOCUMENT NO. 450/4-92/010, DATED APRIL 1992. IF EPA PROMULGATES QUALITY ASSURANCE PROCEDURES IN 40 CFR 60, APPENDIX F, **OUALITY ASSURANCE AUDITS SHALL BE CONDUCTED** ACCORDING TO SUCH PROCEDURES. IF EITHER EPA DOCUMENT NO. 450/4-92/010 OR SUBSEQUENTLY PROMULGATED PROCEDURES IN 40 CFR 60, APPENDIX F, AS APPLICABLE, DOES NOT CONTAIN AUDIT PROCEDURES FOR THE OPACITY CEM SELECTED BY THE OWNER OR OPERATOR, THE OWNER OR OPERATOR SHALL, IN WRITING, PROPOSE AUDIT PROCEDURES TO THE COMMISSIONER FOR REVIEW AND WRITTEN APPROVAL AT LEAST THIRTY (30) DAYS PRIOR TO THE INITIAL OPACITY CEM AUDIT; AND
- (C) IF THE RESULTS OF A QUALITY ASSURANCE AUDIT FAIL TO CONFORM TO THE QUALITY ASSURANCE REQUIREMENTS OF SUBPARAGRAPH (B) OF THIS SUBDIVISION, SUCH OPACITY CEM DATA SHALL BE DEEMED INVALID BY THE COMMISSIONER, AND THE OWNER OR OPERATOR WILL BE DEEMED TO HAVE FAILED THE QUALITY ASSURANCE AUDIT. DATA COLLECTED AFTER ANY FAILED QUALITY ASSURANCE AUDIT SHALL BE INVALID FOR CALCULATING PERCENT DATA AVAILABILITY IN ACCORDANCE WITH SUBPARAGRAPH (6)(5)(A) OF THIS SUBSECTION.

#### Subsection (c)(5)

13. Comment: Subsection (c)(5)(B)(iii) requires a source owner or operator to conduct quality assurance audits during each calendar quarter in which the source operates. Wisvest requests that the Department revise proposed subsection (c)(5) to allow a source owner or operator to defer linearity testing to the following quarter if the source operated for fewer than 168 hours in a calendar quarter. This revision would conform the subdivision to EPA's requirements for acid rain program sources.

**Response:** The Department should not revise proposed subsection (c)(5)(B)(iii) in response to this comment. EPA's requirements for acid rain program sources in 40 CFR 75 are addressed in the revision to proposed Section 4 explained in response to Comment 12. The requirements of

40 CFR 75 apply to monitoring of sulfur dioxide and NOx emissions. Since subsection (c)(5)(B)(iii) applies to opacity CEM monitoring, it should not be revised to conform to 40 CFR 75.

### Subsection (c)(6)(A), minimum data availability

#### 14. Comment:

- The Department should increase the minimum data availability requirements of subsections (c)(6)(A)(i) and (ii) to match those demonstrated as achievable in Connecticut. EPA's review of regional monitoring records demonstrates that the majority of sources are able to maintain more than 98% data availability for opacity and gaseous CEM. (EPA)
- The Department should decrease the minimum data availability requirements of subsections (c)(6)(A)(i) and (ii) to include a minimum data availability requirement for all CEM equipment (opacity and gaseous) of 80%, which is consistent with EPA's minimum data availability for CEM equipment. (NRG)
- Subsection (c)(6)(A)(ii) is vague and ambiguous, and, since that subparagraph applies to emissions data from gaseous CEM equipment, the phrase "air pollutant emissions other than opacity" should be replaced with "gaseous emissions data." (DOD)
- The Department should limit the allowable periods when data is not available to periods of unavoidable monitoring system malfunction. Specifically, the Department should: (1) add the language from existing (e)(1) as a new (c)(6)(A)(i) and change the numbering of the subsequent subparagraphs; (2) add the phrase "except for during periods of unavoidable malfunction of the monitoring system" to existing (e)(1); and add a sentence at the end of subsection (c)(6)(A)(iv) stating that the allowable periods of missing data only apply in cases of unavoidable system malfunction. (EPA)

**Response:** After receiving conflicting comments on the minimum data availability requirements of subsections (c)(6)(A)(i) and (ii), the Department reviewed the demonstrated data availability for Connecticut sources. The Department agrees with EPA that the proposed minimum data availability of 90% for all emissions other than opacity should be increased, not to 98% but to 95%, as the majority of Connecticut sources are able to maintain this level of data availability. With this change, Section 4 will require a 95% minimum data availability for all CEM data. This revision will also provide the clarity regarding the application of subsection (c)(6)(A)(ii) that DOD seeks in its comment.

EPA also suggests that Section 4 should specifically limit the allowable periods when data is not available to periods of unavoidable monitoring system malfunction. EPA suggests the Department specify this by maintaining a revised version of current subsection (e)(1), which requires a source owner or operator to operate CEM equipment whenever the source is operating. While subsection (e)(1) is deleted from the proposed amendment to Section 4, the requirement to operate required monitoring equipment when a source is operating is included in the corresponding amendment to Section 7, discussed in detail later in response to Comment 30. While it is not necessary that Section 4 also require that monitoring equipment should be

operated whenever the source is in operation, to improve clarity, a statement referencing Section 7 with respect to Section 4's data availability requirements should be added.

The Department should re-number proposed subsection (c)(6) as subsection (c)(5) to correspond to the revision explained in the response to Comment 12 and should revise proposed subsection (c)(6)(A) as follows:

#### (<del>6)</del>(**5**) DATA AVAILABILITY.

- (A) THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN OPACITY-CEM EQUIPMENT PURSUANT TO SUBSECTION (b) OF IN ACCORDANCE WITH THIS SECTION OR GASEOUS OR OPACITY CEM EQUIPMENT PURSUANT TO SUBDIVISION (1) OF THIS SUBSECTION, PERMIT OR ORDER SHALL MEET THE FOLLOWING DATA AVAILABILITY REQUIREMENTS WITH RESPECT TO DATA AVAILABILITY ON AN EMISSION LIMITATION-SPECIFIC BASIS:
  - (i) WHILE THE SOURCE IS OPERATING, THE OWNER OR OPERATOR SHALL OPERATE REQUIRED CEM EQUIPMENT PURSUANT TO SECTION 22a-174-7(b) OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES, AND ALLOWABLE PERIODS OF MISSING DATA SHALL APPLY ONLY TO PERIODS OF DELIBERATE SHUTDOWN ALLOWED BY SECTION 22a-174-7(b) OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES, UNAVOIDABLE SYSTEM MALFUNCTION OR AS OTHERWISE PROVIDED UNDER THIS SUBDIVISION,
  - (i) (ii) OPACITY EMISSIONS EXCEPT AS PROVIDED IN SUBPARAGRAPHS (B) AND (C) OF THIS SUBDIVISION, DATA SHALL BE AVAILABLE FOR NO LESS THAN NINETY-FIVE PERCENT (95%) OF THE TOTAL OPERATING HOURS OF THE SOURCE IN ANY CALENDAR QUARTER, AND
  - (ii) FOR AIR POLLUTANT EMISSIONS OTHER THAN OPACITY,
    DATA SHALL BE AVAILABLE FOR NO LESS THAN NINETY
    PERCENT (90%) OF THE TOTAL OPERATING HOURS OF
    THE SOURCE IN ANY CALENDAR QUARTER, AND
  - (iii) PERCENT DATA AVAILABILITY SHALL BE CALCULATED USING THE FOLLOWING EQUATION:

% Data Availability = 
$$\left(\frac{\text{Unit Operating Time-Monitoring Downtime}}{\text{Unit Operating Time}}\right) * 100$$

WHERE:

UNIT OPERATING TIME = TOTAL HOURS OF SOURCE OPERATION AT ANY LEVEL DURING THE CALENDAR **OUARTER.** 

MONITORING DOWNTIME = TOTAL HOURS OF SOURCE OPERATION AT

ANY LEVEL DURING THE CALENDAR QUARTER WHERE EITHER NO CEM EQUIPMENT DATA WAS COLLECTED OR THE CEM EQUIPMENT DATA WAS INVALID. SUCH PERIODS INCLUDE, BUT ARE NOT LIMITED TO, QUALITY ASSURANCE ACTIVITIES SUCH AS CALIBRATION, PREVENTATIVE MAINTENANCE, AND CALIBRATION DRIFT EXCEEDANCES OR QUALITY ASSURANCE AUDITS THAT RESULT IN INVALID DATA.

#### Subsection (c)(6), other comments

15. Comment: Subsection (c)(6)(A) should be revised to address use of an opacity monitor or other CEM equipment in a common stack situation. Such revision should define an operating hour as an hour when one or both sources that share a common stack are in operation. Such a definition would specify that any hour in which two sources sharing a common stack are operating is considered as a single operating hour rather than two. (NRG)

**Response:** The Department interprets proposed Section 4(c)(6)(A) to apply to a source with a common stack as the commenter describes. No change to the proposed language is necessary.

#### 16. Comment:

- The operating hour limits of subparagraphs (B) and (C) of subsection (c)(6) establish maximum hours of operation for CEM and opacity monitors seeking exemption from the data availability requirements. DEP should use 504 hours as the operating hour limit for both opacity and gaseous CEM equipment. (NRG)
- The 72 hour maximum period of operation for gaseous CEM equipment in subsection (c)(6)(C) should be replaced with the current requirement to prepare and submit an engineering evaluation under section 4.3 of the Department's Continuous Emission Monitoring Guideline. Alternatively, the maximum operating time period in subparagraph (C) should be increased from 72 hours to 252 hours. This change is recommended because the amended data availability requirements present a significant tightening of the current requirements of Section 4, and data availability is not a matter affecting health or the environment since a source's emissions and emission control equipment remain the same.

(Pfizer)

**Response:** The proposed operating hour limits of subsection (c)(6)(C) represent a reasonable allowance for the Commissioner to grant an exemption, after taking into account minimum data availability and other performance requirements. The Department calculated these operating hour limits based in part on the proposed minimum data availability of 95% for opacity monitor data and 90% for all other pollutant data. Due to the increase in the proposed minimum data availability for pollutant data other than opacity explained in response to Comment 14, the proposed 72 hour operating hour limit should be increased to 336 hours. However, the Department should not increase the operating hour limit to 504 hours as one commenter recommends since the commenter fails to present calculations or other persuasive evidence for the recommended increase.

In summary, the Department should revise the proposed exemptions from the minimum data availability in subsection (c)(6) in two respects: (1) in response to comment on the operating hours explained in the paragraph above; and (2) to correspond to the revision explained in the response to Comment 14:

- (B) THE COMMISSIONER, IN WRITING, MAY EXEMPT THE OWNER OR OPERATOR OF A SOURCE FROM THE MINIMUM DATA AVAILABILITY REQUIREMENTS OF **SUBPARAGRAPHS** (A)(ii) **AND** (A)(iii) OF THIS SUBDIVISION IF SUCH SOURCE IS EQUIPPED WITH PROPERLY OPERATING OPACITY CEM EQUIPMENT, AND THE SOURCE IS OPERATED LESS THAN OR EQUAL TO FIVE HUNDRED FOUR (504) HOURS IN THE CALENDAR QUARTER.
- (C) THE COMMISSIONER, IN WRITING, MAY EXEMPT THE OWNER OR OPERATOR OF A SOURCE FROM THE MINIMUM DATA AVAILABILITY REQUIREMENTS OF **SUBPARAGRAPHS** (A)(ii) **AND** (A)(iii) OF THIS SUBDIVISION IF SUCH SOURCE IS EQUIPPED WITH PROPERLY OPERATING GASEOUS CEM EQUIPMENT, AND THE SOURCE IS OPERATED LESS THAN OR EQUAL TO SEVENTY-TWO (72)-THREE HUNDRED THIRTY-SIX (336) HOURS IN THE CALENDAR QUARTER.
- (D) TO OBTAIN AN EXEMPTION UNDER SUBPARAGRAPHS (B) OR (C)

. . .

17. Comment: Information to support a request for an exemption from the data availability requirements is required to be submitted 30 days from the end of the quarter (subsection (c)(6)(D)). For ease of filing, the Department should revise the time of submittal to the "end of the month following the end of the calendar quarter." (NRG)

**Response:** The Department should not revise proposed subsection (c)(6)(D) in response to this comment. The proposed 30-day submission deadline is consistent with the 30-day deadline in

proposed subsection (d)(6), which is described in response to Comment 22.

#### Subdivision (d)(2), signatory requirements

#### 18. Comment:

• R&C supports the signatory requirements of (d)(2) for referencing the standards of R.C.S.A. section 22a-430-3(b)(2) rather than the recently adopted R.C.S.A. section 22a-174-2a(a). The requirements of R.C.S.A. section 22a-174-2a(a) raise significant uncertainty and go significantly beyond federal baseline requirements for the state's Title V program.

If the Department intends to replace the reference in (d)(2) to R.C.S.A. section 22a-430-3(b)(2) with a reference to R.C.S.A. section 22a-174-2a(a), the Department should revise R.C.S.A. section 22a-174-2a(a) at the earliest convenience to address the uncertainties of this section. (R&C)

- The proposed reference to R.C.S.A. section 22a-430-3(b)(2) should be replaced now with R.C.S.A. section 22a-174-2a(a) to avoid confusion. (CBIA)
- While having no objection to the proposed reference to section 22a-430-3(b)(2), the Department should change the citation to section 22a-174-2a(a) now rather than later, if the Department does intend to make this change in the future. (Pfizer)

**Response:** The Department should not revise the reference to R.C.S.A. section 22a-430-3(b)(2) proposed in subsection (d)(2). Until and unless R.C.S.A. section 22a-174-2a(a) is revised, subsection (d)(2) should remain as proposed.

**19. Comment:** The form currently used to submit quarterly opacity and NOx exceedance data includes a certification for a duly authorized representative of the source but does not include a certification for the individual preparing the filing as required by subsection (d)(2). The Department should issue a modified form to match the requirements of amended Section 4. (NRG)

**Response:** At such time as the amendment to Section 4 becomes effective, the Department should revise current forms or create new forms to allow for reporting pursuant to the requirements of amended Section 4.

#### Other requirements of subsection (d)

# 20. Comment:

- The record maintenance requirements of subsection (d)(3) are broader than necessary to determine compliance with the requirements of Section 4 and applicable emission limitations and standards, and the Department should revise subdivision (3) accordingly. (Pfizer)
- The requirement in subsection (d)(3) to maintain data "to determine compliance with an emissions limitation or standard" is unnecessary in conjunction with and contradictory to subsection (d)(1), which requires a source owner or operator to maintain data to "evaluate compliance with Chapter 446c of the Connecticut General Statutes." The last sentence in

**Response:** The Department agrees that subsection (d)(3) should be revised for clarity and conciseness as follows:

- (3) THE OWNER OR OPERATOR OF ANY SOURCE SUBJECT TO THE PROVISIONS OF CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS ADOPTED THEREUNDER SHALL MAINTAIN ALL DATA, DOCUMENTS AND REPORTS REQUIRED BY THIS SECTION FROM ANY MONITORING EQUIPMENT AND ALL DOCUMENTS AND REPORTS PREPARED FROM SUCH DATA-IN A LEGIBLE AND COMPREHENSIBLE FORM FOR AT LEAST FIVE (5) YEARS FROM THE DATE SUCH DATA, DOCUMENT OR REPORT IS CREATED. GENERATED. THE OWNER OR OPERATOR OF ANY SUCH SOURCE SHALL MAINTAIN ALL DATA, DOCUMENTS AND REPORTS NECESSARY FOR THE COMMISSIONER TO DETERMINE COMPLIANCE WITH AN EMISSION LIMITATION OR STANDARD.
- **21. Comment:** The record retention requirement of subsection (d)(4) should be revised to specify that a certification of installation issued by the Commissioner is a sufficient record to determine compliance. A time period should be associated with this requirement. (Pfizer)

**Response:** The Department should delete subsection (d)(4) as indicated below. The subdivision, which addresses the retention of records evidencing compliance with CEM equipment calibration drift testing, has become outdated and unnecessary since its addition to earlier drafts of the proposed amendment:

(4) THE OWNER OR OPERATOR OF ANY CEM EQUIPMENT SHALL RETAIN DOCUMENTATION EVIDENCING COMPLIANCE WITH THE SEVEN (7) DAY CALIBRATION DRIFT TEST PERFORMED PRIOR TO COMMENCING THE INITIAL RELATIVE ACCURACY TEST AUDIT ON THE SUBJECT CEM EQUIPMENT REQUIRED PURSUANT TO SUBDIVISION (c)(4) OF THIS SECTION IN THE APPLICABLE PERFORMANCE SPECIFICATION OF APPENDIX B OF 40 CFR 60.

Remaining subdivisions (5) and (6) should be re-numbered as subdivisions (4) and (5).

**22.** Comment: Subsection (d)(6) requires that the quarterly reports be filed no later than 30 days after the end of the quarter. For ease of filing, the submittals should be required by the "end of the month following the end of the quarter." (NRG)

**Response:** The Department should not revise the proposed 30-day submission deadline. That time period is consistent with 40 CFR 60 and other federal and state reporting requirements. Subsection (d)(6) should be re-numbered as subsection (d)(5) as explained in the response to Comment 21.

# Subsection (e)

**23.** Comment: Subsection (e) allows the Commissioner to waive monitoring requirements if a source owner or operator demonstrates that the source is physically incapable of violating emissions standards and limitations. Since the CEM requirements of Section 4 are pollutant-specific, subsection (e)'s physical incapability determination should also be pollutant-specific. (CBIA)

**Response:** In addition to the revision to proposed subsection (e) explained in response to Comment 7, the Department should add the text highlighted below to subsection (e):

(e) THE COMMISSIONER MAY EXEMPT AN OWNER OR OPERATOR OF A SOURCE SUBJECT TO THIS SECTION FROM THE REQUIREMENTS OF THIS SECTION AS THEY APPLY TO A PARTICULAR AIR POLLUTANT IF SUCH OWNER OR OPERATOR DEMONSTRATES IN WRITING, FOR THE COMMISSIONER'S WRITTEN APPROVAL, THAT SUCH SOURCE IS PHYSICALLY INCAPABLE OF VIOLATING ANY APPLICABLE REQUIREMENT FOR SUCH AIR POLLUTANT SET FORTH IN CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER.

# Comments specific to municipal waste combustors ("MWCs")

**24.** Comment: As proposed, the language in subsection (c)(1) establishes a basis for the Department to mandate changes in monitoring that may have serious economic consequences. Technical and economic feasibility should be considered. Subsection (c)(2) is similar in granting broad authority to the Commissioner to require stack testing. Connecticut's MWCs are subject to R.C.S.A. section 22a-174-38 ("Section 38"), which includes extensive requirements to monitor, report and stack test. (BRRFOC)

**Response:** The Department appreciates that Section 38 includes significant requirements for the operation of MWCs. Such requirements are necessary to meet Connecticut's air quality needs and federal air emissions requirements for MWCs. In considering the need for additional emissions monitoring at a MWC or any other source, the Commissioner will consider compliance with all applicable requirements in statute or regulation. Any changes to existing monitoring requirements will be made with all process that is due under the law. See also the response to Comment 10.

**25. Comment:** MWC owners and operators are subject to extensive monitoring, reporting and recordkeeping through R.C.S.A. section 22a-174-38 and facility permits. Such requirements are sufficient, and the owners and operators of MWC facilities should be exempt from additional monitoring, reporting and recordkeeping requirements that may result from the proposed amendment. (Wheelabrator)

**Response:** The Department should not exempt MWCs from Section 4. As stated in the response to Comment 24, the Department appreciates that MWCs are subject to significant

requirements by the Department. Such requirements are necessary to regulate air emissions from MWCs in a manner that is sufficiently protective of Connecticut's air quality. Other categories of stationary sources also are subject to requirements specific to that source category through regulations and/or permits. MWCs and all such categories of stationary sources will be required to comply with all applicable regulations, including regulations of general application to many source categories, as may be amended from time to time. Section 4 is necessary to include general monitoring requirements for all stationary sources and is designed to function in conjunction with source-specific requirements.

**26. Comment:** Proposed Section 4 provides the Department with the ability to create new enforceable permit conditions on any facility without providing the facility with the ability to comment on or discuss the change. The existing requirements of Section 38 are appropriate for defining appropriate emissions limits and comprehensive monitoring, reporting and recordkeeping requirements. (Covanta)

**Response:** As explained in the responses to Comments 10 and 24, Section 4 is not intended to and does not allow the Department to circumvent the current permit and regulatory amendment processes. When considering the need to change existing or to add new requirements on a source owner or operator, the Department has and will continue to comply with all the notice and public participation requirements of the law. See the comment and response under Section VI.A of this report.

While Section 38 does include emission limits applicable to MWCs and related monitoring, reporting and recordkeeping requirements, those requirements do not replace the general monitoring, recordkeeping and reporting requirements of Section 4. The Department should not revise Section 4 to make any exception for source owners and operators to which Section 38 applies.

#### Additional comments by Hearing Officer

The Department should make the corrections identified in comments 27 and 28.

- **27. Subsection (d)(1):** To maintain the Commissioner's authority in existing subsection (c) to require a source owner or operator by notice to submit any records or reports of monitoring data and other information necessary for compliance, proposed subsection (d)(1) should indicate that information is required to be submitted on forms only if the Commissioner has created forms that address the information requested, as follows:
- (1) THE COMMISSIONER MAY, BY WRITTEN NOTICE, REQUIRE THE OWNER OR OPERATOR OF ANY SOURCE TO CREATE, MAINTAIN AND SUBMIT DATA, RECORDS OR REPORTS OF MONITORING DATA AND **OTHER** INFORMATION DEEMED NECESSARY BY THE COMMISSIONER TO EVALUATE COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER. SUCH INFORMATION SHALL BE RECORDED, COMPILED AND SUBMITTED ON FORMS **AS MAY BE** FURNISHED OR PRESCRIBED BY THE COMMISSIONER. THE WRITTEN NOTICE

# SHALL PROVIDE THE DATE BY WHICH SUCH DATA, RECORDS OR REPORTS SHALL BE SUBMITTED TO THE COMMISSIONER.

- **28. Subsection** (d)(5): To maintain consistency with existing Section 4, proposed subsection (d)(5) should apply only to information from opacity CEM equipment. The Department does not need to receive additional quarterly reports under this section. Proposed subsection (d)(5) should be re-numbered as subsection (d)(4) as explained in response to Comment 21 and revised as follows:
- (5)(4) EACH CALENDAR QUARTER, THE OWNER OR OPERATOR OF ANY OPACITY CEM EQUIPMENT REQUIRED PURSUANT TO SUBSECTION (b) OF THIS SECTION OR GASEOUS OR OPACITY CEM EQUIPMENT REQUIRED PURSUANT TO SUBDIVISION (1) OF THIS SUBSECTION, PERMIT OR ORDER SHALL SUBMIT THE FOLLOWING INFORMATION TO THE COMMISSIONER:

. . . .

- **29. Technical corrections:** The Department should make the following technical corrections in the identified subsections of the proposed amendment:
- Subsection (b)(1)(B): The word "gaseous" should be eliminated as indicated below to make Section 4 consistent with 40 CFR 51, Appendix P, section 2.1.1.1, which does not require opacity CEM for fuel burning equipment burning only gaseous fuel:
  - [(ii)] (B) ["Fuel-burning equipment" burning liquid or solid fuels having a maximum rated heat input of] ANY GASEOUS, LIQUID OR SOLID FUEL BURNING EQUIPMENT WITH A MAXIMUM RATED HEAT INPUT GREATER THAN OR EQUAL TO two hundred fifty million [(250,000,000) "BTU"] BTU per hour (250,000,000 BTU/HR) [or more];
- Subsection (c)(2): The word "regulation" should be added as a form of written notice in addition to a permit or an order by which the Commissioner may require alternative monitoring at a source for which CEM equipment is not reasonably available, as follows:
  - (2) IF THE COMMISSIONER DETERMINES THAT CEM EQUIPMENT IS NOT REASONABLY AVAILABLE FOR A SOURCE OF AIR POLLUTION, THE COMMISSIONER MAY, BY WRITTEN NOTICE, REQUIRE THE OWNER OR OPERATOR OF SUCH SOURCE TO COMPLY WITH AN ALTERNATIVE MONITORING TECHNIQUE OR CONDUCT INTERMITTENT STACK TESTING TO VERIFY THE SOURCE IS IN COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER. SUCH WRITTEN NOTICE SHALL BE IN THE FORM OF A REGULATION, PERMIT OR ORDER AND . . .
- Internal references should refer by name to the outermost unit of the section for consistency

with formatting requirements of the Legislative Commissioner's Office. In proposed subsection (b)(1), the word "subdivisions" should be replaced with "subsections;" in proposed subsections (b)(2) and (b)(3), the word "subparagraph" should be replaced with "subdivision;" in proposed subsections (b)(7) and (b)(8), the words "subdivision" and "subdivisions" should be replaced with "subsection" and "subsections;" in proposed subsection (c)(5)(C), the word "subparagraph" should be replaced with "subdivision;" and in proposed subsection (d)(4), the word "subparagraph" should be replaced with "subsection."

#### C. AMENDMENT OF SECTION 7

#### Subsection (a)

**30. Comment:** Proposed subsection (a) implies that it is legally permissible to operate a source despite a breakdown, failure or deliberate shutdown of air pollution control equipment, even if it leads to an exceedence of an emission limitation. Existing subsection (a), which is deleted by the proposed amendment, makes it clear that such equipment "shall be maintained in operation at all times that the stationary source is in operation or is emitting air pollutants." (EPA)

Specifically, EPA suggests two changes to improve the clarity of proposed subsection (a): (1) Retain the language of the existing subsection (a). This unambiguous provision will alert source owners and operators that their legal obligation is to operate the necessary pollution control equipment at all times the source is emitting pollutants; and (2) add a statement similar to existing Section 4(e)(4) that helps clarify a source owner or operator's legal obligation to comply with the emissions standards regardless of the status of control equipment. For example, after (a)(3), the Department could add, "compliance with this subsection in no way relieves the owner or operator of any responsibility to comply with applicable emission standards."

**Response:** EPA's comment is directly on point with a message that the Department staff stressed to those members of the regulated community participating in the rule development process and that the Department sought to state clearly in the proposed amendment -- compliance with the notice requirements of Section 7 in no way excuses an owner or operator of a source from complying with any applicable emission limitation or requirement.

The proposed amendment is structured as indicated below to state this point and address EPA's concern:

- (1) Subsection (b)(1) requires a source owner or operator to operate air pollution control equipment and monitoring equipment whenever the source is operating with the exception provided in existing Section 7 of performing maintenance that may only be performed with the source operating;
- (2) Subsection (a) states an owner or operator's due diligence obligation to minimize emissions should the source operate to produce an exceedance of an emission limitation during air pollution control equipment breakdown, failure or deliberate shutdown. It does not provide an excuse from such an exceedance, but creates a legal obligation to minimize such an event:
- (3) Subsection (f) specifically states that "nothing in this section . . . shall excuse non-

compliance with any emission limitation or emission standard and other applicable requirements" and reinforces the Commissioner's existing authority to take enforcement action during any breakdown, failure or deliberate shutdown of air pollution control equipment or monitoring equipment.

EPA's suggestions to improve the clarity are appreciated, and the Department should revise Section 7 at subsections (a) and (f) as follows:

- (a) BREAKDOWN, FAILURE AND DELIBERATE SHUTDOWN.
  - (1) NEITHER BREAKDOWN, FAILURE NOR DELIBERATE SHUTDOWN OF ANY AIR POLLUTION CONTROL EQUIPMENT OR MONITORING EQUIPMENT NOR SUBMISSION OF ANY NOTICE PURSUANT TO THIS SECTION SHALL EXCUSE THE OWNER OR OPERATOR OF ANY SOURCE FROM THE OBLIGATION TO COMPLY WITH AN APPLICABLE EMISSION LIMITATION OR EMISSION STANDARD OR OTHER APPLICABLE REQUIREMENT.
  - (2) IF AN OWNER OR OPERATOR OPERATES A STATIONARY SOURCE TO PRODUCE EMISSIONS OF AN AIR POLLUTANTS POLLUTANT DURING BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN OF ANY AIR POLLUTION CONTROL EQUIPMENT SO AS TO PRODUCE AN EXCEEDANCE OF AN APPLICABLE EMISSION LIMITATION OR EMISSION STANDARD, THE OWNER OR OPERATOR SHALL:
    - (A) EXERCISE DUE DILIGENCE TO MINIMIZE EMISSIONS WHILE SUCH CONTROL EQUIPMENT IS INOPERATIVE;
    - (B) CONTINUE THE USE OF MONITORING EQUIPMENT; AND
    - (C) GIVE NOTICE TO THE COMMISSIONER AS REQUIRED BY SUBSECTIONS (d) AND (e) OF THIS SECTION.

. . .

[(d)](f) [The Commissioner may attach conditions to the operation of the stationary source during the period of shutdown or breakdown.] EXCEPT AS PROVIDED IN SUBSECTION (g) OF THIS SECTION, COMPLIANCE WITH THE NOTICE REQUIREMENTS OF SUBSECTIONS (d) AND (e) OF THIS SECTION OR THE OPERATION REQUIREMENTS OF SUBSECTION (b) OF THIS SECTION SHALL NOT RELIEVE THE OWNER OR OPERATOR FROM COMPLYING WITH ALL APPLICABLE EMISSION LIMITATIONS AND EMISSION STANDARDS. THE COMMISSIONER MAY TAKE ANY ENFORCEMENT ACTION, INCLUDING REQUIRING THE OWNER OR OPERATOR TO CEASE OPERATION OF THE STATIONARY SOURCE, OR ATTACH ANY CONDITION TO THE OPERATION

OF THE STATIONARY SOURCE DURING THE PERIOD OF ANY BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN OF AIR POLLUTION CONTROL OR MONITORING EQUIPMENT. NOTHING IN THIS SECTION OR ANY NOTICE SUBMITTED PURSUANT TO THIS SECTION SHALL EXCUSE NON-COMPLIANCE WITH ANY APPLICABLE EMISSION LIMITATION OR EMISSION STANDARD AND OTHER APPLICABLE REQUIREMENTS OR PRECLUDE THE COMMISSIONER FROM TAKING ANY ACTION NECESSARY AUTHORIZED BY LAW TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT.

- **31. Comment:** BRRFOC requests that the Department consider the following revisions to subsection (a):
  - (a) BREAKDOWN, FAILURE AND OR DELIBERATE SHUTDOWN. IF AN OWNER OR OPERATOR OPERATES A STATIONARY SOURCE TO PRODUCE EMISSIONS IN A MANNER WHICH RESULTS IN AN EXCEEDANCE OF AN APPLICABLE EMISSIONS LIMITATION OR EMISSION STANDARD OF AIR POLLUTANTS DURING BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN OF ANY AIR POLLUTION CONTROL EQUIPMENT SO AS TO PRODUCE AN EXCEEDANCE OF AN APPLICABLE EMISSION LIMITATION OR EMISSION STANDARD, THE OWNER OR OPERATOR SHALL:
    - (1) EXERCISE DUE DILIGENCE TO MINIMIZE EMISSIONS WHILE SUCH CONTROL EQUIPMENT IS INOPERATIVE;
    - (2) CONTINUE THE USE OF MONITORING EQUIPMENT **NOT SUBJECT TO BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN**; AND . . . .

**Response:** The Department should not revise the proposed language as recommended in this comment. No explanation is provided in support of the recommended revision, and such revision does not make any obvious improvement in the section.

#### Subsection (b)(1)

**32. Comment:** Subsection (b)(1) states that monitoring equipment may not be shut down for maintenance while a source is operating, unless such maintenance requires the source to continue operating. Proposed subsection (b)(1) conflicts with Section 4(c)(6), which defines the data availability requirements for CEM equipment and includes maintenance as an allowable downtime. (Am. Ref-Fuel, Wheelabrator) Am. Ref-Fuel states that its CEM equipment maintenance requires short-term shut down of the monitors but does not require operation of the boilers. The proposed amendment would require shutdown of the boilers during routine maintenance, and Am. Ref-Fuel does not believe this is the Department's intent.

**Response:** The Department agrees that the proposed language in subsection (b)(1) regarding maintenance should be clarified, and, to more precisely state the intent, the Department should

replace the proposed language with the existing language regarding maintenance, as follows:

(1) [No] WHILE A STATIONARY SOURCE IS IN OPERATION, NO person shall deliberately shut down any [such] OPERATIONAL AIR POLLUTION control OR MONITORING equipment [, method or other instrument specified in subsection 22a-174-7 (a) while the source is in operation except for such necessary maintenance as cannot be accomplished when the stationary source itself is not in operation and is not emitting air pollutants.] OR DELIBERATELY KEEP SUCH AIR POLLUTION CONTROL EQUIPMENT OR MONITORING EQUIPMENT SHUT DOWN EXCEPT TO PERFORM NECESSARY MAINTENANCE, WHICH MAINTENANCE REQUIRES THAT THE STATIONARY SOURCE BE OPERATING CANNOT BE ACCOMPLISHED WHEN THE STATIONARY SOURCE ITSELF IS NOT IN OPERATION AND IS NOT EMITTING AIR POLLUTANTS.

**Subsection** (b)(2), shutdown of air pollution control equipment and monitoring equipment

33. Comment: CRRA agrees with the clarifications of subsection (b)(2), which address longstanding concerns among some members of the regulated community regarding situations in which a source owner or operator may shut down pollution control equipment.

**Response:** The Department appreciates CRRA's agreement with the proposed language of subsection (b)(2).

**34. Comment:** Proposed Section 7 is ambiguous as to how it would apply to an unavoidable control or monitoring equipment malfunction. In particular, proposed Section 7(b)(2) provides that "Notwithstanding . . . [Section 7(b)(1)], a source owner or operator may shut down air pollution control equipment or monitoring equipment while the source is in operation if: (A) the owner or operator is not required to operate such equipment by a permit, order or regulation; [and] (B) the source is in compliance with applicable emission limitations and emission standards while the air pollution control equipment is shutdown . . ." It is not clear what this provision adds by allowing such shutdown, since under condition (A) the equipment must not have been required in the first place. If this provision is intended to address shutdown as provided under a startup, shutdown and malfunction provision in a separate applicable permit, order or regulation limit, this should be clarified. Similar treatment would be appropriate for startups and malfunctions, to ensure that the progress achieved over the past several years on this issue is clearly reflected in Section 7. (R&C)

**Response:** Subsection (b)(2) is intended to address deliberate shut down of air pollution control equipment, not unavoidable malfunction. *See* the revision in response to Comment 35. Under subsection (b)(2), an owner or operator may shut down air pollution control equipment on a source that is capable of meeting applicable emissions limits and standards without such equipment operating. Such a situation may arise if a source owner or operator invests in "overcontrol" of air pollutant emissions to use the emissions controlled to generate credits for use in an emissions trading program. A situation of overcontrol may also arise if a source owner or operator adds air pollution control equipment and later reduces a pollutant emission through pollution prevention efforts or where a change outside of the control of the owner or operator

causes a reduction in the input of a pollutant. In such cases, subsection (b)(2) allows for the owner or operator to shutdown air pollution control equipment and monitoring equipment deliberately as long as the owner and operator complies with applicable standards and limits.

The deliberate shutdown provision of subsection (b)(2) is not drafted to address air pollution control equipment or monitoring equipment malfunction. If a source owner or operator experiences an air pollution control or monitoring equipment malfunction, Section 7 requires the source owner or operator to comply with the due diligence requirements of (a)(2) and the notice requirements of subsections (d) and (e). If a source exceeds an applicable emission limit or standard during a malfunction but the limit or standard includes an applicable malfunction exception from such limit or standard, the source owner or operator may qualify for that exception from meeting the emission limit or standard. Nonetheless, for that same exceedence the owner or operator must comply with the due diligence and notice requirements of Section 7.

**35.** Comment: In subsection (b)(2), the Department should add the word "deliberately" prior to shut down to prevent confusion. (Pfizer)

**Response:** The Department should revise subsection (b)(2) as follows:

- (2) NOTWITHSTANDING SUBDIVISION (1) OF THIS SUBSECTION, A SOURCE OWNER OR OPERATOR MAY **DELIBERATELY** SHUT DOWN AIR POLLUTION CONTROL EQUIPMENT OR MONITORING EQUIPMENT WHILE THE SOURCE IS IN OPERATION IF:
- **36. Comment:** Regarding subsection (b)(2)(C), commenters offered the following:
- Subparagraph (C) is unclear and should be revised. (BRRFOC)
- Subparagraph (C) implies that emission reduction credits cannot be generated for use in an emissions credit trading program if the monitoring equipment is not operated. (Wisvest) If this is the Department's intention, Wisvest suggests revising (b)(2)(C) as follows:
  - (C) WHEN AIR POLLUTION CONTROL EQUIPMENT AND MONITORING EQUIPMENT IS **NOT** OPERATED, THE EMISSIONS CONTROLLED AND MEASURED BY SUCH EQUIPMENT MAY **NOT** BE USED TO GENERATE CREDITS IN AN EMISSIONS CREDIT TRADING PROGRAM ADMINISTERED BY EPA OR THE DEPARTMENT.
- Subparagraph (C) should be deleted. (Pfizer, DOD, CBIA) Subparagraph (C) is unnecessarily restrictive, and the conditions in subparagraphs (A) and (B) are sufficient to limit the circumstances in which a source owner or operator may deliberately shut down air pollution control equipment. (Pfizer, DOD) There may be circumstances in which a source owner or operator installs control or monitoring equipment that is not required by permit, order or regulation and that is not needed to comply with an applicable emission limitation. In these circumstances, the owner or operator should be able to shut down such equipment voluntarily, even if the source has not installed such equipment to generate emission

**Response:** The Department should revise subparagraph (C) in a manner similar in substance to that suggested by Wisvest so that subparagraph (C) specifies that emissions may not be used to calculate credits generated for use in an emissions credit trading program if monitoring equipment is not operated. With this specification, subsection (b)(2) includes sufficient and necessary circumstances for an exception from the requirements of subsection (b)(1).

Subsection (b)(2) should appear as follows in the final text of Section 7:

- (2) NOTWITHSTANDING SUBDIVISION (1) OF THIS SUBSECTION, A SOURCE OWNER OR OPERATOR MAY **DELIBERATELY** SHUT DOWN AIR POLLUTION CONTROL EQUIPMENT OR MONITORING EQUIPMENT WHILE THE SOURCE IS IN OPERATION IF:
  - (A) THE OWNER OR OPERATOR IS NOT REQUIRED TO OPERATE SUCH EQUIPMENT BY A PERMIT, ORDER OR REGULATION;
  - (B) THE SOURCE IS IN COMPLIANCE WITH APPLICABLE EMISSION LIMITATIONS AND EMISSION STANDARDS WHILE THE AIR POLLUTION CONTROL EQUIPMENT IS SHUTDOWN; AND
  - (C) EMISSIONS RELEASED WHILE WHEN AIR POLLUTION
    CONTROL EQUIPMENT AND MONITORING EQUIPMENT THAT
    MEASURES SUCH EMISSIONS IS OPERATED DELIBERATELY
    SHUT DOWN, THE EMISSIONS CONTROLLED AND MEASURED
    BY SUCH EQUIPMENT MAY BE ARE NOT USED TO GENERATE
    CALCULATE CREDITS GENERATED IN AN EMISSIONS CREDIT
    TRADING PROGRAM. ADMINISTERED BY EPA OR THE
    DEPARTMENT.

#### Subsection (d), ten-day notification requirements

**37. Comment:** Subsection (d) should apply only to air pollution control equipment or monitoring equipment required by permit, order or regulation. Such specification of the air pollution control equipment or monitoring equipment to which the subsection applies is consistent with language proposed in subsection (c) and subsection (e)(1). (DOD)

**Response:** The Department should add the phrase "required by permit, order or regulation" to subsection (d) as follows:

[(c)](d) IF ANY BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN OF AIR POLLUTION CONTROL EQUIPMENT OR MONITORING EQUIPMENT **REQUIRED BY PERMIT, ORDER OR REGULATION** CONTINUES FOR MORE THAN TWENTY-FOUR (24) HOURS AND THE SOURCE OPERATES . . .

**38.** Comment: CRRA is pleased to see the specific requirements for notification to the Department in the event of breakdown, failure or deliberate shutdown of air pollution control equipment as these requirements will enable more streamlined communication between regulated entities and the Department.

**Response:** The Department appreciates CRRA's recognition that the proposed amendment will serve to streamline communication between the Department and members of the regulated community.

#### Subsection (e), immediate notification requirements

**39. Comment:** Pfizer recommends that the word "submitted" in subdivision (2) of subsection (e) should be changed to "made." The term "submitted" implies a written notice while the subdivision allows for notification by telephone, email or in person as well as written notification by facsimile.

**Response:** The Department should revise subsection (e)(2) as follows:

- (2) NOTIFICATION TO COMPLY WITH THIS SUBSECTION SHALL BE MADE BY TELEPHONE, ELECTRONIC MAIL, FACSIMILE OR IN PERSON IMMEDIATELY AFTER THE BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN OCCURRED OR IS DISCOVERED OR IN THE EXERCISE OF REASONABLE CARE SHOULD HAVE BEEN DISCOVERED, AND IN NO CASE SHALL SUCH NOTICE BE SUBMITTED MADE LATER THAN TWO (2) BUSINESS DAYS AFTER SUCH BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN.
- **40. Comment:** Subsection (e)(2) raises due process concerns since an owner or operator may be in a situation in which it is impossible to avoid a violation for failing to report a breakdown or failure that the owner or operator is not aware of. For example, in certain situations an owner or operator may find it impossible to discover a breakdown or failure within two business days in the exercise of reasonable care, yet that owner or operator is required to submit notice no later than two business days after the occurrence of the breakdown or failure. (R&C)

R&C suggests that the Department revise subsection (e)(2) as follows:

(2) NOTIFICATION TO COMPLY WITH THIS SUBSECTION SHALL BE MADE BY TELEPHONE, ELECTRONIC MAIL, FACSIMILE OR IN PERSON IMMEDIATELY AFTER THE BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN OCCURRED OR IS DISCOVERED OR IN THE EXERCISE OF REASONABLE CARE SHOULD HAVE BEEN DISCOVERED, AND IN NO CASE SHALL SUCH NOTICE BE SUBMITTED LATER THAN TWO (2) BUSINESS DAYS AFTER SUCH BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN.

Alternatively, R&C requests that the Department explain how a source owner or operator can comply with subsection (e)(2) where an equipment breakdown or failure is not initially discovered or discoverable in the exercise of reasonable care.

**Response:** An owner or operator who exercises reasonable care in the operation of air pollution control equipment and monitoring equipment and yet does not discover a breakdown, failure or deliberate shutdown of such equipment would not be in violation of the section since the exercise of reasonable care would eliminate failures to discover a breakdown caused by carelessness or negligence.

To link the timing of submission of an immediate notice to discovery, the Department should delete the phrase "occurred or" from proposed subsection (e)(2), yet retain the two business day deadline to establish an appropriate and clear boundary on notice. With this change and the revision made in response to Comment 39, the final text of subsection (e)(2) should appear as follows:

- (2) NOTIFICATION TO COMPLY WITH THIS SUBSECTION SHALL BE MADE BY TELEPHONE, ELECTRONIC MAIL, FACSIMILE OR IN PERSON IMMEDIATELY AFTER THE BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN OCCURRED OR IS DISCOVERED OR IN THE EXERCISE OF REASONABLE CARE SHOULD HAVE BEEN DISCOVERED, AND IN NO CASE SHALL SUCH NOTICE BE SUBMITTED MADE LATER THAN TWO (2) BUSINESS DAYS AFTER SUCH BREAKDOWN, FAILURE OR DELIBERATE SHUTDOWN.
- **41. Comment:** The ten-day written report and immediate notification requirements of subsection (e) should be revised as follows:
- The requirements should be consistent with subsection (d), which requires a report only in situations where, after a shutdown, there is "an exceedance of an emission limitation or standard;" and
- Subsection (e)(2) should require notice no earlier than 24 hours after an event of breakdown, failure or deliberate shutdown in order to allow a source owners and operators the opportunity to discover, diagnose and repair prior to giving notice. (CBIA)

**Response:** The Department should not revise subsection (e) in response to comment by CBIA. The notification requirements of subsections (d) and (e) are designed collectively to strike a balance between allowing a source owner or operator sufficient time to diagnose and correct a breakdown, failure or deliberate shutdown and providing the Department with sufficient information regarding compliance. The written notification requirement of (d), which requires the owner or operator to prepare a detailed, written explanation of an event of breakdown, failure or deliberate shutdown, is *triggered after an event has occurred for more than 24 hours* in which time the source is operating and an exceedance of an emission limitation occurs.<sup>1</sup> The source

<sup>1</sup> This approach is consistent with recent EPA statements regarding reporting of malfunctions:

Thus, if a source experiences a minor problem that does not affect its ability to meet the applicable

owner or operator has 10 days to prepare this report of an event that involves an actual exceedance. In contrast, the immediate notification requirements of subsection (e) are triggered by the occurrence of an event and depend on the owner or operator's estimate of the length of the event and planned operation of the source. The immediate notification is not triggered by an actual exceedance and notification is not required in writing. This requirement, which can be satisfied with a telephone call, is triggered upon *discovery* of an event of breakdown, failure or deliberate shutdown that the owner or operator anticipates will last longer than 24 hours and during which the owner or operator anticipates operating.

#### Comments specific to municipal waste combustors ("MWCs")

**42. Comment:** CRRA applauds the efforts of the Department in removing the duplicative requirements for MWCs from Section 7. CRRA worked cooperatively with the Department in the development of R.C.S.A. section 22a-174-38 ("Section 38") for MWCs. It is most logical for regulations pertaining to MWCs to be located in Section 38 and not scattered across other sections of the R.C.S.A.

**Response:** The Department appreciates CRRA's recognition that the deletion of the requirements for MWCs in Section 7 is logical since the requirements in Section 7 are obsolete and outdated due to the promulgation of Section 38.

**43.** Comment: Section 7 should be adjusted to recognize the startup, shutdown and malfunction provisions inclusive of all reporting requirements established in Section 38. (Covanta)

**Response:** The Department should not revise Section 7 in response to this comment. The comment implies that the startup, shutdown and malfunction provisions of Section 38, including the reporting of such events, are duplicative of Section 7, and therefore should allow for MWC owners and operators to be exempt from all or part of Section 7. However, the emissions limits in Section 38 take into account periods of startup, shutdown and malfunction allowed in Section 38. A MWC owner or operator would not be required to submit notification under Section 7 if the MWC is operated in compliance with the emission limits in Section 38, inclusive of allowed periods of startup, shutdown and malfunction.

**44. Comment:** Section 38 should be revised to incorporate final amendments to 40 CFR 60.58b regarding the fifteen hour malfunction exemption for loss of boiler water level control and combustion air control. (Covanta)

**Response:** As the comment is directed to Section 38 rather than the subject matter of this proceeding, the Department should make no change to Section 7 in response to the comment. The Department should consider the need to address recent changes in EPA's regulations for MWCs in Section 38 and may as a result begin a separate amendment process for Section 38.

# **VII. Final Text of Proposed Amendments**

The final text of the amendments to Sections 4 and 7 is located at Attachment 3 to this report.

### **VIII. Conclusion**

Based upon the comments submitted by interested parties and addressed in this Hearing Report, I recommend the final amendments, as contained in Attachment 3 to this report, be submitted by the Commissioner of Environmental Protection for approval by the Attorney General and the Legislative Regulations Review Committee. Based upon the same considerations, I also recommend these proposed amendments, upon promulgation, be submitted to the U.S. Environmental Protection Agency as revisions to the Connecticut State Implementation Plan for Air Quality.

	August 4, 2003
/s/Merrily A. Gere	Date
Hearing Officer	

# Attachment 1

# **List of Commenters**

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#### 4. Darryl R. Conner

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#### 5. Eric J. Brown, Associate Counsel

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#### 6. Mark H. Bobman

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# 7. Cynthia L. Karlic

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# 11. Brian Bahor, QEP

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#### 12. Brian C. S. Freeman

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# Attachment 2

# Text of Proposed Amendments: R.C.S.A. Sections 22a-174-4 and 22a-174-7

Section 22a-174-4 of the Regulations of Connecticut State Agencies is amended to read as follows:

Sec. 22a-174-4. ['']Source[''] monitoring, record keeping[,] AND reporting [and authorization of inspection of "air pollution" "sources."]

- (a) ["Source" Monitoring. ] **DEFINITIONS.** FOR THE PURPOSES OF THIS SECTION:
- [(a)(1) The owner or "operator" of any "air pollution" "source" shall install, use, and maintain monitoring equipment, establish and maintain records, and make periodic reports as prescribed herein by the "Commissioner."
- (a)(2) In addition to the requirements of subsection (b) and (c), the "commissioner" may require the owner or "operator" of any "source" to monitor continuously "air pollutant" "emissions" where he determines that equipment and methods for such monitoring are reasonably available. The "Commissioner" may determine that continuous monitoring of "air pollutant" "emissions" is not technologically feasible. In such cases, the "Commissioner" may require monitoring or intermittent "stack" testing of such "source" in whatever reasonable manner he determines to be necessary to demonstrate the "source" is in compliance with applicable regulations.
- (a)(3) Nothing in subsections (a)(1) and (a)(2) shall be construed to require installation or use of monitoring devices or methods on any "source" for the purpose of determining compliance with applicable regulations when such "source" can be demonstrated, to the satisfaction of the "commissioner," to be physically incapable of violating such regulations.]
- (1) "CALENDAR QUARTER" MEANS A CONSECUTIVE THREE (3) MONTH PERIOD (NONOVERLAPPING) BEGINNING ON JANUARY 1, APRIL 1, JULY 1 OR OCTOBER 1.
- (2) "COAL BURNING EQUIPMENT" MEANS FUEL-BURNING EQUIPMENT THAT COMBUSTS COAL.
- (3) "GASEOUS, LIQUID OR SOLID FUEL BURNING EQUIPMENT" MEANS FUEL-BURNING EQUIPMENT THAT COMBUSTS GASEOUS, LIQUID OR SOLID FUELS.
- (4) "STANDBY FUEL BURNING EQUIPMENT" MEANS FUEL-BURNING EQUIPMENT THAT IS USED ONLY TO PROVIDE BACKUP HEAT OR POWER.
- (b) [Smoke and "Opacity" Monitoring.] <u>OPACITY CONTINUOUS EMISSIONS MONITORING (CEM).</u>
- [(b)](1) [Effective on January 1, 1976] EXCEPT AS PROVIDED IN SUBDIVISIONS (2) AND (3) OF THIS SUBSECTION, the owner or ["]operator["] of [any of] the [following "]sources["] LISTED IN SUBPARAGRAPHS (A) THROUGH (D) OF THIS SUBDIVISION shall install[, maintain and operate a smoke and "opacity" monitor approved] OPACITY CEM EQUIPMENT. THE OWNER OR

OPERATOR SHALL OPERATE AND MAINTAIN INSTALLED OPACITY CEM EQUIPMENT in accordance with [subsection (d)(1)] SUBDIVISIONS (c)(3) THROUGH (c)(6) OF THIS SECTION AND RETAIN THE DATA GENERATED IN ACCORDANCE WITH SUBSECTION (d) OF THIS SECTION:

- [(i)] (A) ["Fuel-burning equipment" burning coal] ANY COAL BURNING EQUIPMENT;
- [(ii)] (B) ["Fuel-burning equipment" burning liquid or solid fuels having a maximum rated heat input of] ANY GASEOUS, LIQUID OR SOLID FUEL BURNING EQUIPMENT WITH A MAXIMUM RATED HEAT INPUT GREATER THAN OR EQUAL TO two hundred fifty million [(250,000,000) "BTU"] BTU per hour (250,000,000 BTU/HR) [or more];
- [(iii)] (C) ["Incinerators"] ANY INCINERATOR WITH [having] a maximum rated input in excess of two thousand [(2,000)] pounds per hour (2,000 LBS/HR); AND
- [(iv)] (D) [A "process source" that will emit in excess of] ANY PROCESS SOURCE WITH PARTICULATE MATTER EMISSIONS EXCEEDING twenty-five [(25)] pounds per hour (25 LBS/HR) [of "particulate matter" as determined after the application of control equipment, ] when operated at ["]maximum rated capacity[."] IN COMBINATION WITH POLLUTION CONTROL EQUIPMENT.
- [(b)](2) The provisions of [subsection (b)(1)(i)] SUBPARAGRAPH (1)(A) OF THIS SUBSECTION, CONCERNING COAL BURNING EQUIPMENT, shall not apply to:
  - (A) Any [coal burning space heater which was] SPACE HEATER installed in any single family home on or before May 1, 1975, provided THAT SUCH SPACE HEATER DOES NOT COMBUST [only anthracite] coal with a sulfur content [of less than] GREATER THAN OR EQUAL TO THREE-QUARTERS OF ONE PERCENT (0.75%) by weight (dry basis) [is used for fuel.];
  - (B) [(ii)] Any coal burning equipment in a commercial establishment in regular operation on or before May 1, 1975, provided THAT SUCH COAL BURNING EQUIPMENT DOES NOT COMBUST [only anthracite] coal with a sulfur content [of less than] GREATER THAN OR EQUAL TO THREE-QUARTERS OF ONE PERCENT (0.75%) by weight (dry basis) [is used for fuel] and COAL CONSUMPTION IS less than seventy-five (75) tons per year [ is consumed.]; AND
  - (C) [(iii)] Any coal burning equipment used primarily for educational or

historical demonstrations or exhibits[.], PROVIDED THAT SUCH COAL BURNING EQUIPMENT DOES NOT COMBUST COAL WITH A SULFUR CONTENT EXCEEDING ONE AND ONE-HALF PERCENT (1.5%) BY WEIGHT (DRY BASIS). SUCH COAL BURNING EQUIPMENT [These "sources" shall include] INCLUDES, but [are] IS not limited to, blacksmiths' forges, steam locomotives, and steamboats [provided, however, that said "sources" do not burn fuel which contains sulfur in excess of one and one-half percent (1.5%) by weight (dry basis)].

- [(b)](3) The provisions of [subsections (b)(1)(ii) and (b)(1)(v)] SUBPARAGRAPH (1)(B) OF THIS SUBSECTION, CONCERNING GASEOUS, LIQUID OR SOLID FUEL BURNING EQUIPMENT, shall not apply to:
  - (A) [(i)] ["Standby fuel burning equipment" which is used only to provide emergency heat or power and which operates not more than a total of] ANY STANDBY FUEL BURNING EQUIPMENT OPERATING LESS THAN one hundred sixty-eight (168) hours in [any] A calendar year. [. The "Commissioner" may request such proof and reports of operations as he deems necessary.] FOR THE PURPOSE OF THIS SUBPARAGRAPH, THE TERM "OPERATING" SHALL NOT INCLUDE EMISSIONS TESTING OR OPERATING ONLY TO MAINTAIN RELIABILITY IN EMERGENCY SITUATIONS; AND
  - (B) [(ii) Gas turbines] TURBINES COMBUSTING NATURAL GAS, LIQUID FUEL OR A MIXTURE OF LIQUID FUEL AND NATURAL GAS [equipped with any smoke control apparatus which, in the "Commissioner's" judgment, is adequate to prevent visible discharge of an "opacity" greater than that designated as no. 1 on the "Ringelmann chart," or 20% "opacity."] THAT COMPLY WITH THE APPLICABLE PARTICULATE MATTER AND OPACITY LIMITATIONS SET FORTH IN SECTION 22a-174-18 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES WITHOUT UTILIZING POLLUTION CONTROL EQUIPMENT.
  - [(b)(4) The owner or "operator "of any "source" listed in subsection (b)(1) who on or before September 1, 1974 has installed and continues to properly operate a smoke and "opacity" detector and recorder not approved by the "commissioner" shall not be required to install a smoke and "opacity" monitor approved by the "commissioner" until January 1, 1985. The "Commissioner" may request such proof of date of purchase as he deems necessary.]
  - (4) THE COMMISSIONER MAY, IN WRITING, REQUEST WRITTEN DOCUMENTATION FROM THE OWNER OR OPERATOR OF EQUIPMENT LISTED IN SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION TO ASCERTAIN THE APPLICABILITY OF SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION. AN OWNER OR OPERATOR SHALL DELIVER SUCH

DOCUMENTATION TO THE COMMISSIONER WITHIN FOURTEEN (14) DAYS OF RECEIPT OF SUCH A WRITTEN REQUEST.

- [(b)](5) The ["]commissioner["] may [revoke or "modify" an exemption under subsections (a)(3), (b)(2)(ii) and (iii), (b)(3) and (b)(4) if it is determined that repeated violations of subsection 22a-174-18(a) or violations of any specific applicable conditions in these exemptions have occurred or if it is determined that operation of the "source" will prevent or interfere with the "attainment" or maintenance of applicable "ambient air quality standards," create a health hazard or create a nuisance.] GIVE NOTICE TO AN OWNER OR OPERATOR OF A SOURCE WITH AN APPROVAL UNDER SUBSECTION (e) OF THIS SECTION THAT INSTALLATION, OPERATION AND MAINTENANCE OF CEM EQUIPMENT OR SUCH OTHER MONITORING OR INTERMITTENT STACK TESTING AS ALLOWED BY THIS SECTION IS REQUIRED IF THE COMMISSIONER FINDS:
  - (A) REPEATED NONCOMPLIANCE WITH SECTION 22a-174-18 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES HAS OCCURRED;
  - (B) NONCOMPLIANCE WITH THE REQUIREMENTS, LIMITATIONS OR RESTRICTIONS SET FORTH IN SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION HAS OCCURRED;
  - (C) OPERATION OF THE SUBJECT SOURCE HAS INTERFERED WITH OR IS LIKELY TO INTERFERE WITH THE ATTAINMENT OR MAINTENANCE OF AMBIENT AIR QUALITY STANDARDS, CREATE A HEALTH HAZARD OR CREATE A NUISANCE;
  - (D) MONITORING EQUIPMENT IS NEEDED TO DETERMINE COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER; OR
  - (E) THE SOURCE HAS BEEN ALTERED OR THE OPERATIONS OF THE SOURCE HAVE CHANGED SUCH THAT SUBSECTION (e) IS NO LONGER APPLICABLE.
- (6) THE NOTICE PROVIDED FOR IN SUBDIVISION (5) OF THIS SUBSECTION SHALL BE IN THE FORM OF A PERMIT OR ORDER AND SHALL SPECIFY REQUIREMENTS FOR INSTALLATION AND OPERATION OR OTHER MONITORING INCLUDING A DAY BY WHICH SUCH INSTALLATION AND OPERATION OR OTHER MONITORING IS TO COMMENCE.
- (7) AN OWNER OR OPERATOR THAT CLAIMS SUBDIVISION (b)(1) IS NOT APPLICABLE BY VIRTUE OF COMPLIANCE WITH SUBDIVISIONS (b)(2) OR (b)(3) SHALL, UPON NOTICE FROM THE COMMISSIONER, INSTALL, OPERATE AND MAINTAIN CEM EQUIPMENT OR CONDUCT OTHER MONITORING OR

INTERMITTENT STACK TESTING AS ALLOWED BY THIS SECTION, AND COMPLY WITH SUBSECTIONS (c) AND (d) OF THIS SECTION, IF THE COMMISSIONER FINDS:

- (A) REPEATED NONCOMPLIANCE WITH SECTION 22a-174-18 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES HAS OCCURRED;
- (B) NONCOMPLIANCE WITH THE REQUIREMENTS, LIMITATIONS OR RESTRICTIONS SET FORTH IN SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION HAS OCCURRED;
- (C) OPERATION OF THE SUBJECT SOURCE HAS INTERFERED WITH OR IS LIKELY TO INTERFERE WITH THE ATTAINMENT OR MAINTENANCE OF AMBIENT AIR QUALITY STANDARDS, CREATE A HEALTH HAZARD OR CREATE A NUISANCE; OR
- (D) MONITORING EQUIPMENT IS NEEDED TO DETERMINE COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER.
- (8) THE NOTICE PROVIDED FOR IN SUBDIVISION (b)(7) OF THIS SECTION SHALL BE IN THE FORM OF A PERMIT OR ORDER AND SHALL SPECIFY REQUIREMENTS FOR INSTALLATION AND OPERATION OR OTHER MONITORING INCLUDING A DAY BY WHICH SUCH INSTALLATION AND OPERATION OR OTHER MONITORING IS TO COMMENCE.

## [(c) Record Keeping and Reporting.

- (c)(1) The "Commissioner" may require the submission of any records or reports of monitoring data and other information as he deems necessary to fulfill the purpose and policies contained in these regulations. Such record keeping and reporting may be required of any "point source" or any "indirect source" of "air pollution." Records and reports required by the "Commissioner" concerning "air pollutants," fuels, and operational information shall be recorded, compiled, and submitted on forms furnished or prescribed by the "Commissioner." And shall be signed or verified in writing by a ranking corporate officer or managing official with offices located in the state. Such signature shall constitute personal affirmation that such officer has exercised due diligence in verifying the accuracy of the record or report and that, to the best of his knowledge and belief, the record or report is true complete, and complies fully with applicable state requirements. Such signature shall subject the responsible official to liability for false or misleading statements.
- (c)(2) Any monitoring data required of any "source" under subsection (a) or (b) of this section shall be kept current and in a form allowing easy inspection and shall be retained by the "source" for a period of three years.

(c)(3) The owner or "operator" of any "source" described in subsection (b)(1) with the exception of "fuel burning equipment" having a maximum gross heat input capacity of less than two hundred fifty million (250,000,000) "BTUs" per hour, shall submit to the "Commissioner" on forms furnished or prescribed by him a report summarizing "opacity" monitoring data for the preceding three months. Such reports shall be due not later than thirty (30) days following the end of each calendar quarter.

## (d) Approved Monitors

- (d)(1) The "Commissioner" shall, from time to time, publish the design, performance, and installation specifications for an approvable smoke and "opacity" monitor. No smoke and "opacity" monitor shall be considered approved until the manufacturer has submitted evidence that the monitor meets all specifications required by the "Commissioner" and until an independent laboratory verifies that a randomly selected instrument or instruments representative of the instrument for which approval is sought, meets all specifications required by the "Commissioner". The "Commissioner" reserves the right to disapprove any monitor and to revoke any previous approval if the "Commissioner" believes that the monitor will not, in fact, meet specifications.
- (d)(2) Effective April 1, 1989 for those "stationary sources" which must meet the requirements of Appendix P of Title 40 Code of Federal Regulations Part 51 an approvable smoke and "opacity" monitor shall meet the design, performance and installation specifications in Performance Specification 1 of Appendix B of Title 40 Code of Federal Regulations Part 60 and the requirements in sections 3.4.1, 3.6, 3.7, 3.8, 4.1, 4.2, 4.4, 4.5 and 4.6 in Appendix P of Title 40 Code of Federal Regulations Part 51.
- (A) In addition to the requirements of subdivision 22a-174-4(d)(1), the owner or "operator" of any "stationary source" subject to the requirements of this subdivision shall calibrate such monitoring equipment.
- (B) The information collected under this subdivision shall be used in determining compliance with the provisions of subdivision 22a-174-18(a)(1).
- (C) In addition to the reporting requirements of subdivision 22a-174-4(c)(3), the owner or "operator" of any "stationary source" subject to the requirements of this subdivision shall submit the reports listed in Appendix P of Title 40 Code of Federal Regulations Part 51 and shall include information on the total process operating time of the equipment over the three (3) preceding months.

## (e) Operation.

- (e)(1) Equipment as may be required pursuant to this section shall be maintained in operation at any time that the "source" is in operation.
  - (e)(2) Except for necessary maintenance, no "person" shall deliberately shut down any

monitoring device or method required under these regulations while the "source" being monitored is in operation or is emitting "air pollutants."

- (e)(3) In the case of deliberate shutdown or of a breakdown or failure of any monitoring device or method during which time the "source" will be in operation, all reasonable measures shall be taken to assure resumption of monitoring as soon as possible. In the event such shut down of monitoring equipment is expected, or may reasonably be expected, to continue for longer than 72 hours, and if the "source" is to be operated at any time during that period, the "Commissioner" shall be promptly notified in writing. Such notification shall specify the steps being taken to restore monitoring, the expected duration of the monitoring shut down, and the length of time that the "source" will be in operation during the shut down.
- (e)(4) Failure of any monitoring equipment in no way relieves the owner or "operator" of any "source" from the responsibility to comply with applicable "air pollutant" "emission" regulations or standards.
- (e)(5) It shall be a violation of these regulations to adjust or alter any monitoring device or method so as to falsify its readings or results.

## (f) "Source" Inspection.

- (f)(1) The "Commissioner" or his designated agent upon presentation of his credentials may:
  - (i) Enter at all reasonable times upon any public or private property, except a private residence, for the purpose of inspection and investigation to ascertain possible violations of these regulations, in accordance with constitutional limitations;
  - (ii) At reasonable times have access to records and may obtain copies thereof; and

At any reasonable time inspect any monitoring equipment or method and sample any "emissions."]

- (c) GENERAL OPACITY AND GASEOUS CEM EQUIPMENT OPERATION AND PERFORMANCE.
  - (1) IF THE COMMISSIONER, IN HIS OR HER SOLE DISCRETION, DETERMINES THAT OPACITY OR GASEOUS CEM EQUIPMENT IS REASONABLY AVAILABLE FOR A SOURCE OF AIR POLLUTION, AND THAT SUCH MONITORING EQUIPMENT IS NECESSARY FOR THE DEPARTMENT TO OBTAIN OPACITY OR EMISSION DATA, THE COMMISSIONER MAY REQUIRE, BY WRITTEN NOTICE TO THE OWNER OR OPERATOR OF SUCH SOURCE, THE INSTALLATION AND OPERATION OF CEM EQUIPMENT. SUCH WRITTEN NOTICE SHALL BE IN THE FORM OF A PERMIT OR ORDER AND SHALL INCLUDE REQUIREMENTS FOR INSTALLATION AND OPERATION INCLUDING A DAY BY WHICH SUCH INSTALLATION AND

### OPERATION IS TO COMMENCE.

(2) IF THE COMMISSIONER DETERMINES THAT CEM EQUIPMENT IS NOT REASONABLY AVAILABLE FOR A SOURCE OF AIR POLLUTION, THE COMMISSIONER MAY, BY WRITTEN NOTICE, REQUIRE THE OWNER OR OPERATOR OF SUCH SOURCE TO COMPLY WITH AN ALTERNATIVE MONITORING TECHNIQUE OR CONDUCT INTERMITTENT STACK TESTING TO VERIFY THE SOURCE IS IN COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER. SUCH WRITTEN NOTICE SHALL BE IN THE FORM OF A PERMIT OR ORDER AND SHALL INCLUDE THE REQUIRMENTS FOR SUCH ALTERNATIVE MONITORING OR TESTING INCLUDING A DAY BY WHICH SUCH ALTERNATIVE MONITORING OR TESTING OR TESTING IS TO COMMENCE.

- (3) MONITORING PLAN. UNLESS OTHERWISE SPECIFIED BY PERMIT OR ORDER OF THE COMMISSIONER, THE OWNER OR OPERATOR OF ANY SOURCE FOR WHICH CONSTRUCTION COMMENCED ON OR AFTER THE EFFECTIVE DATE OF THIS AMENDMENT TO THIS SECTION WHO IS REQUIRED TO INSTALL, OPERATE AND MAINTAIN OPACITY CEM EQUIPMENT PURSUANT TO SUBSECTION (b) OF THIS SECTION OR GASEOUS OR OPACITY CEM EQUIPMENT PURSUANT TO SUBDIVISION (1) OF THIS SUBSECTION SHALL SUBMIT TO THE COMMISSIONER FOR APPROVAL, AT LEAST SIXTY (60) DAYS BEFORE THE INITIATION OF THE PERFORMANCE SPECIFICATION TESTING REQUIRED BY SUBDIVISION (4) OF THIS SUBSECTION, A MONITORING PLAN CONTAINING THE INFORMATION SPECIFIED IN SUBPARAGRAPHS (A) THROUGH (D) OF THIS SUBDIVISION:
  - (A) A BRIEF DESCRIPTION OF THE SOURCE, INCLUDING, BUT NOT LIMITED TO, TYPE OF UNIT OR PROCESS, TYPE OF FUEL COMBUSTED, TYPE OR TYPES OF EMISSION CONTROL DEVICES, AND OPERATIONAL PARAMETERS;
  - (B) A DESCRIPTION OF THE MONITORING EQUIPMENT DESIGN, PROPOSED MONITOR LOCATION AND SAMPLING SITE LOCATION. THIS DESCRIPTION SHOULD INCLUDE, BUT IS NOT LIMITED TO, FACILITY SCHEMATICS AND ENGINEERING DRAWINGS OF THE MONITORING AND SAMPLE PROBE LOCATIONS, DATA ACQUISITION SYSTEM SPECIFICATIONS, ANALYTICAL MONITORING TECHNIQUE AND SAMPLING SYSTEM DESIGN;
  - (C) AN EXPLANATION OF THE PERFORMANCE SPECIFICATION TESTING TO BE CONDUCTED BY THE OWNER OR OPERATOR AS REQUIRED BY SUBDIVISION (4) OF THIS SUBSECTION; AND

(D) A QUALITY ASSURANCE PLAN INCLUDING PROCEDURES FOR CALIBRATION, CALIBRATION DRIFT DETERMINATION AND ADJUSTMENT, PREVENTATIVE MAINTENANCE, DATA RECORDING, CALCULATION, AUDITS AND CORRECTIVE ACTION FOR MONITORING SYSTEM BREAKDOWNS.

- (4) PERFORMANCE SPECIFICATIONS. THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN OPACITY CEM EQUIPMENT PURSUANT TO SUBSECTION (b) OF THIS SECTION OR GASEOUS OR OPACITY CEM EQUIPMENT PURSUANT TO SUBDIVISION (1) OF THIS SUBSECTION, PERMIT OR ORDER SHALL MEET THE APPLICABLE PERFORMANCE SPECIFICATIONS OF 40 CFR 60, APPENDIX B.
- (5) QUALITY ASSURANCE.
  - (A) THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN GASEOUS CEM EQUIPMENT PURSUANT TO SUBDIVISION (1) OF THIS SUBSECTION, PERMIT OR ORDER SHALL MEET THE QUALITY ASSURANCE REQUIREMENTS OF APPENDIX F OF 40 CFR 60.
  - (B) THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN OPACITY CEM EQUIPMENT PURSUANT TO SUBSECTION (b) OF THIS SECTION, SUBDIVISION (1) OF THIS SUBSECTION, PERMIT OR ORDER SHALL MEET THE FOLLOWING REQUIREMENTS WITH RESPECT TO QUALITY ASSURANCE:
    - (i) CALIBRATION SHALL BE ADJUSTED WHENEVER THE DAILY ZERO OR UPSCALE CALIBRATION EXCEEDS PLUS/MINUS TWO PERCENT (±2%) OPACITY;
    - (ii) DATA SHALL BE INVALID FOR CALCULATING DATA AVAILABILITY IN ACCORDANCE WITH SUBDIVISION (6) OF THIS SUBSECTION IF THE ZERO OR UPSCALE CALIBRATION VALUE EXCEEDS EITHER THE REFERENCE ZERO OR THE UPSCALE CALIBRATION VALUE RECORDED DURING THE MOST RECENT CLEAR-PATH CALIBRATION BY PLUS/MINUS TWO PERCENT (±2%) OPACITY FOR FIVE (5) CONSECUTIVE DAYS OR PLUS/MINUS FIVE PERCENT (±5%) OPACITY ON ANY SINGLE DAY. THE PERIOD OF INVALID DATA BEGINS WITH

EITHER THE FIFTH CONSECUTIVE OCCURRENCE OF A DRIFT VALUE EXCEEDING PLUS/MINUS TWO PERCENT (±2%) OPACITY OR WITH THE LAST DAILY CHECK PRECEDING THE SINGLE OCCURRENCE OF A DRIFT VALUE EXCEEDING PLUS/MINUS FIVE PERCENT (±5%) OPACITY. THE PERIOD OF INVALID DATA SHALL END WHEN A CALIBRATION DRIFT CHECK, CONDUCTED AFTER CORRECTIVE ACTION, DEMONSTRATES THAT RELIABLE MONITORING DATA IS BEING GENERATED;

- (iii) QUALITY ASSURANCE AUDITS SHALL BE CONDUCTED DURING EACH CALENDAR QUARTER IN WHICH THE SOURCE OPERATES:
- (iv) THE COMMISSIONER SHALL BE NOTIFIED, IN WRITING, NO FEWER THAN THIRTY (30) DAYS PRIOR TO THE INITIALLY PROPOSED QUALITY ASSURANCE AUDIT; AND
- (v) QUALITY ASSURANCE AUDITS SHALL BE
  CONDUCTED IN ACCORDANCE WITH THE
  PROCEDURES CONTAINED IN "PERFORMANCE
  AUDIT PROCEDURES FOR OPACITY MONITORS,"
  EPA DOCUMENT NO. 450/4-92/010, DATED APRIL
  1992. IF EPA DOCUMENT NO. 450/4-92/010 DOES NOT
  CONTAIN AUDIT PROCEDURES FOR THE OPACITY
  CEM SELECTED BY THE OWNER OR OPERATOR,
  THE OWNER OR OPERATOR SHALL, IN WRITING,
  PROPOSE AUDIT PROCEDURES TO THE
  COMMISSIONER FOR REVIEW AND WRITTEN
  APPROVAL AT LEAST THIRTY (30) DAYS PRIOR TO
  THE INITIAL OPACITY CEM AUDIT.
- (C) IF THE RESULTS OF A QUALITY ASSURANCE AUDIT FAIL TO CONFORM TO THE QUALITY ASSURANCE REQUIREMENTS OF SUBPARAGRAPH (B) OF THIS SUBDIVISION, SUCH OPACITY CEM DATA SHALL BE DEEMED INVALID BY THE COMMISSIONER, AND THE OWNER OR OPERATOR WILL BE DEEMED TO HAVE FAILED THE QUALITY ASSURANCE AUDIT. DATA COLLECTED AFTER ANY FAILED QUALITY ASSURANCE AUDIT SHALL BE INVALID FOR CALCULATING PERCENT DATA AVAILABILITY IN ACCORDANCE WITH SUBPARAGRAPH (6)(A) OF THIS SUBSECTION.

- (6) DATA AVAILABILITY.
  - (A) THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN OPACITY CEM EQUIPMENT PURSUANT TO SUBSECTION (b) OF THIS SECTION OR GASEOUS OR OPACITY CEM EQUIPMENT PURSUANT TO SUBDIVISION (1) OF THIS SUBSECTION, PERMIT OR ORDER SHALL MEET THE FOLLOWING REQUIREMENTS WITH RESPECT TO DATA AVAILABILITY:
    - (i) OPACITY EMISSIONS DATA SHALL BE AVAILABLE FOR NO LESS THAN NINETY-FIVE PERCENT (95%) OF THE TOTAL OPERATING HOURS OF THE SOURCE IN ANY CALENDAR QUARTER,
    - (ii) FOR AIR POLLUTANT EMISSIONS OTHER THAN OPACITY, DATA SHALL BE AVAILABLE FOR NO LESS THAN NINETY PERCENT (90%) OF THE TOTAL OPERATING HOURS OF THE SOURCE IN ANY CALENDAR QUARTER, AND
    - (iii) PERCENT DATA AVAILABILITY SHALL BE CALCULATED USING THE FOLLOWING EQUATION:

% Data Availability = 
$$\left(\frac{\text{Unit Operating Time-Monitoring Downtime}}{\text{Unit Operating Time}}\right) * 100$$

WHERE:

UNIT OPERATING TIME = TOTAL HOURS OF SOURCE OPERATION AT ANY LEVEL DURING THE CALENDAR QUARTER.

MONITORING DOWNTIME = TOTAL HOURS OF SOURCE OPERATION AT
ANY LEVEL DURING THE CALENDAR
QUARTER WHERE EITHER NO CEM
EQUIPMENT DATA WAS COLLECTED OR THE
CEM EQUIPMENT DATA WAS INVALID. SUCH
PERIODS INCLUDE, BUT ARE NOT LIMITED
TO, QUALITY ASSURANCE ACTIVITIES SUCH
AS CALIBRATION, PREVENTATIVE
MAINTENANCE, AND CALIBRATION DRIFT
EXCEEDANCES OR QUALITY ASSURANCE
AUDITS THAT RESULT IN INVALID DATA.

(B) THE COMMISSIONER, IN WRITING, MAY EXEMPT THE OWNER

OR OPERATOR OF A SOURCE FROM THE MINIMUM DATA AVAILABILITY REQUIREMENTS OF SUBPARAGRAPH (A)(i) OF THIS SUBDIVISION IF SUCH SOURCE IS EQUIPPED WITH PROPERLY OPERATING OPACITY CEM EQUIPMENT, AND THE SOURCE IS OPERATED LESS THAN OR EQUAL TO FIVEHUNDRED FOUR (504) HOURS IN THE CALENDAR QUARTER.

- (C) THE COMMISSIONER, IN WRITING, MAY EXEMPT THE OWNER OR OPERATOR OF A SOURCE FROM THE MINIMUM DATA AVAILABILITY REQUIREMENTS OF SUBPARAGRAPH (A)(ii) OF THIS SUBDIVISION IF SUCH SOURCE IS EQUIPPED WITH PROPERLY OPERATING GASEOUS CEM EQUIPMENT, AND THE SOURCE IS OPERATED LESS THAN OR EQUAL TO SEVENTY-TWO (72) HOURS IN THE CALENDAR QUARTER.
- (D) TO OBTAIN AN EXEMPTION UNDER SUBPARAGRAPHS (B) OR (C) OF THIS SUBDIVISION, THE OWNER OR OPERATOR OF THE SOURCE SHALL SUBMIT THE FOLLOWING INFORMATION TO THE COMMISSIONER WITHIN THIRTY (30) DAYS FOLLOWING THE LAST DAY OF THE CALENDAR QUARTER FOR WHICH THE EXEMPTION IS SOUGHT:
  - (i) A REQUEST FOR AN EXEMPTION FOR A SPECIFIED CALENDAR QUARTER,
  - (ii) THE ACTUAL OPERATING HOURS OF THE SOURCE DURING THE CALENDAR QUARTER,
  - (iii) THE DURATION OF AND NATURE OF THE CEM EQUIPMENT BREAKDOWNS, REPAIRS OR ADJUSTMENTS MADE DURING THE CALENDAR QUARTER, AND
  - (iv) THE ACTUAL DATA AVAILABILITY ACHIEVED DURING THE CALENDAR QUARTER.

## (d) RECORD KEEPING AND REPORTING.

(1) THE COMMISSIONER MAY, BY WRITTEN NOTICE, REQUIRE THE OWNER OR OPERATOR OF ANY SOURCE TO CREATE, MAINTAIN AND SUBMIT DATA, RECORDS OR REPORTS OF MONITORING DATA AND INFORMATION DEEMED NECESSARY BY THE COMMISSIONER TO EVALUATE COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER. SUCH INFORMATION SHALL BE RECORDED, COMPILED AND SUBMITTED ON FORMS FURNISHED OR PRESCRIBED BY THE COMMISSIONER. THE WRITTEN NOTICE SHALL PROVIDE THE DATE BY WHICH SUCH DATA, RECORDS OR REPORTS SHALL

BE SUBMITTED TO THE COMMISSIONER.

(2) ANY DOCUMENT, DATA, PLAN, RECORD OR REPORT REQUIRED TO BE SUBMITTED TO THE COMMISSIONER BY THIS SECTION SHALL INCLUDE A CERTIFICATION SIGNED BY A RESPONSIBLE CORPORATE OFFICER OR A DULY AUTHORIZED REPRESENTATIVE OF SUCH OFFICER, AS THOSE TERMS ARE DEFINED IN SUBDIVISION (2) OF SUBSECTION (b) OF SECTION 22a-430-3 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES, AND BY THE INDIVIDUAL OR INDIVIDUALS REPONSIBLE FOR ACTUALLY PREPARING SUCH DOCUMENT, EACH OF WHOM SHALL EXAMINE AND BE FAMILIAR WITH THE INFORMATION SUBMITTED IN THE DOCUMENT AND ALL ATTACHMENTS THERETO, AND SHALL MAKE INQUIRY OF THOSE INDIVIDUALS RESPONSIBLE FOR OBTAINING THE INFORMATION TO DETERMINE THAT THE INFORMATION IS TRUE, ACCURATE AND COMPLETE, AND EACH OF WHOM SHALL CERTIFY IN WRITING AS FOLLOWS:

"I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ATTACHMENTS THERETO, AND I CERTIFY THAT BASED ON REASONABLE INVESTIGATION, INCLUDING MY INQUIRY OF THOSE INDIVIDUALS RESPONSIBLE FOR OBTAINING THE INFORMATION, THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I UNDERSTAND THAT ANY FALSE STATEMENT MADE IN THE SUBMITTED INFORMATION MAY BE PUNISHABLE AS A CRIMINAL OFFENSE UNDER SECTION 22a-175 OF THE CONNECTICUT GENERAL STATUTES OR, IN ACCORDANCE WITH SECTION 22a-6 OF THE CONNECTICUT GENERAL STATUTES, UNDER SECTION 53a-157b OF THE CONNECTICUT GENERAL STATUTES, AND IN ACCORDANCE WITH ANY OTHER APPLICABLE STATUTE."

- (3) THE OWNER OR OPERATOR OF ANY SOURCE SUBJECT TO THE PROVISIONS OF CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS ADOPTED THEREUNDER SHALL MAINTAIN ALL DATA FROM ANY MONITORING EQUIPMENT AND ALL DOCUMENTS AND REPORTS PREPARED FROM SUCH DATA IN A LEGIBLE AND COMPREHENSIBLE FORM FOR AT LEAST FIVE (5) YEARS FROM THE DATE SUCH DATA IS GENERATED. THE OWNER OR OPERATOR OF ANY SUCH SOURCE SHALL MAINTAIN ALL DATA, DOCUMENTS AND REPORTS NECESSARY FOR THE COMMISSIONER TO DETERMINE COMPLIANCE WITH AN EMISSION LIMITATION OR STANDARD.
- (4) THE OWNER OR OPERATOR OF ANY CEM EQUIPMENT SHALL RETAIN DOCUMENTATION EVIDENCING COMPLIANCE WITH THE SEVEN (7) DAY CALIBRATION DRIFT TEST PERFORMED PRIOR TO COMMENCING THE INITIAL RELATIVE ACCURACY TEST AUDIT ON THE SUBJECT CEM

- EQUIPMENT REQUIRED PURSUANT TO SUBDIVISION (c)(4) OF THIS SECTION IN THE APPLICABLE PERFORMANCE SPECIFICATION OF APPENDIX B OF 40 CFR 60.
- (5) EACH CALENDAR QUARTER, THE OWNER OR OPERATOR OF ANY OPACITY CEM EQUIPMENT REQUIRED PURSUANT TO SUBSECTION (b) OF THIS SECTION OR GASEOUS OR OPACITY CEM EQUIPMENT REQUIRED PURSUANT TO SUBDIVISION (1) OF THIS SUBSECTION, PERMIT OR ORDER SHALL SUBMIT THE FOLLOWING INFORMATION TO THE COMMISSIONER:
  - (A) THE DATA OBTAINED THROUGH SUCH EQUIPMENT DURING THE PRECEDING CALENDAR QUARTER THAT IS REQUIRED TO DETERMINE COMPLIANCE WITH AN EMISSION LIMITATION OR STANDARD;
  - (B) A SUMMARY OF SUCH DATA;
  - (C) A COPY OF THE QUALITY ASSURANCE AUDIT CONDUCTED FOR THAT CALENDAR QUARTER; AND
  - (D) A SUMMARY OF ALL CORRECTIVE ACTIONS TAKEN IN RESPONSE TO A FAILED CEM EQUIPMENT AUDIT.
- (6) SUBMISSIONS MADE TO COMPLY WITH SUBDIVISION (5) OF THIS SUBSECTION SHALL BE MADE NO LATER THAN THIRTY (30) DAYS FOLLOWING THE END OF EACH CALENDAR QUARTER.
- (e) THE COMMISSIONER SHALL NOT REQUIRE THE OWNER OR OPERATOR OF A SOURCE OF AIR POLLUTION TO MONITOR AIR POLLUTANT EMISSIONS FOR THE PURPOSE OF DETERMINING COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER IF THE OWNER OR OPERATOR OF SUCH SOURCE DEMONSTRATES IN WRITING, TO THE COMMISSIONER'S SATISFACTION AND FOR THE COMMISSIONER'S WRITTEN APPROVAL, THAT SUCH SOURCE IS PHYSICALLY INCAPABLE OF VIOLATING ANY REQUIREMENT SET FORTH IN CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER.

**STATEMENT OF PURPOSE:** This amendment serves to (1) incorporate relevant portions of the Department's Continuous Emission Monitoring Guideline; (2) revise overall format for consistency with current Department and Legislative Commissioner's Office practices; (3) clarify language as necessary; and (4) remove general monitoring equipment operating requirements to a corresponding amendment to Regulations of Connecticut State Agencies section 22a-174-7.

# Attachment 3

# Final Text of Amendments to R.C.S.A. Sections 22a-174-4 and 22a-174-7

Section 22a-174-4 of the Regulations of Connecticut State Agencies is amended to read as follows:

Sec. 22a-174-4. ['']Source[''] monitoring, record keeping[,] AND reporting [and authorization of inspection of "air pollution" "sources."]

## (a) ["Source" Monitoring. ] **DEFINITIONS.** FOR THE PURPOSES OF THIS SECTION:

- [(a)(1) The owner or "operator" of any "air pollution" "source" shall install, use, and maintain monitoring equipment, establish and maintain records, and make periodic reports as prescribed herein by the "Commissioner."
- (a)(2) In addition to the requirements of subsection (b) and (c), the "commissioner" may require the owner or "operator" of any "source" to monitor continuously "air pollutant" "emissions" where he determines that equipment and methods for such monitoring are reasonably available. The "Commissioner" may determine that continous monitoring of "air pollutant" "emissions" is not technologically feasible. In such cases, the "Commissioner" may require monitoring or intermittent "stack" testing of such "source" in whatever reasonable manner he determines to be necessary to demonstrate the "source" is in compliance with applicable regulations.
- (a)(3) Nothing in subsections (a)(1) and (a)(2) shall be construed to require installation or use of monitoring devices or methods on any "source" for the purpose of determining compliance with applicable regulations when such "source" can be demonstrated, to the satisfaction of the "commissioner," to be physically incapable of violating such regulations.]
- (1) "CALENDAR QUARTER" MEANS A CONSECUTIVE THREE (3) MONTH PERIOD (NONOVERLAPPING) BEGINNING ON JANUARY 1, APRIL 1, JULY 1 OR OCTOBER 1.
- (2) "COAL BURNING EQUIPMENT" MEANS FUEL BURNING EQUIPMENT THAT COMBUSTS COAL.
- (3) "GASEOUS, LIQUID OR SOLID FUEL BURNING EQUIPMENT" MEANS FUEL BURNING EQUIPMENT THAT COMBUSTS GASEOUS, LIQUID OR SOLID FUELS.
- (4) "STANDBY FUEL BURNING EQUIPMENT" MEANS FUEL BURNING EQUIPMENT THAT IS USED ONLY TO PROVIDE BACKUP HEAT OR POWER.
- (b) [Smoke and "Opacity" Monitoring.] <u>OPACITY CONTINUOUS EMISSIONS MONITORING (CEM).</u>

[(b)](1)[Effective on January 1, 1976] <u>EXCEPT AS PROVIDED IN</u> SUBDIVISIONS (2) AND (3) OF THIS SUBSECTION, the owner or

["]operator["] of [any of] the [following "] STATIONARY sources["] LISTED IN SUBPARAGRAPHS (A) THROUGH (D) OF THIS SUBDIVISION shall install[, maintain and operate a smoke and "opacity" monitor approved] OPACITY CEM EQUIPMENT. THE OWNER OR OPERATOR SHALL OPERATE AND MAINTAIN INSTALLED OPACITY CEM EQUIPMENT in accordance with [subsection (d)(1)] SUBSECTIONS (c)(3) AND (c)(4) OF THIS SECTION AND RETAIN THE DATA GENERATED IN ACCORDANCE WITH SUBSECTION (d) OF THIS SECTION:

- [(i)] (A) ["Fuel-burning equipment" burning coal] ANY COAL BURNING EQUIPMENT;
- [(ii)] (B) ["Fuel-burning equipment" burning liquid or solid fuels having a maximum rated heat input of] ANY LIQUID OR SOLID FUEL BURNING EQUIPMENT WITH A MAXIMUM RATED HEAT INPUT GREATER THAN OR EQUAL TO two hundred fifty million [(250,000,000) "BTU"] BTU per hour (250,000,000 BTU/HR) [or more];
- [(iii)] (C) ["Incinerators"] ANY INCINERATOR WITH [having] a maximum rated input in excess of two thousand [(2,000)] pounds per hour (2,000 LBS/HR); AND
- [(iv)] (D) [A "process source" that will emit in excess of] ANY PROCESS SOURCE WITH PARTICULATE MATTER EMISSIONS EXCEEDING twenty-five [(25)] pounds per hour (25 LBS/HR) [of "particulate matter" as determined] after the application of control equipment, when operated at ["]maximum rated capacity.["]
- [(b)](2) The provisions of [subsection (b)(1)(i)] SUBDIVISION (1)(A) OF THIS SUBSECTION, CONCERNING COAL BURNING EQUIPMENT, shall not apply to:
  - (A) Any [coal burning space heater which was] SPACE HEATER installed in any single family home on or before May 1, 1975, provided THAT SUCH SPACE HEATER DOES NOT COMBUST [only anthracite] coal with a sulfur content [of less than] GREATER THAN OR EQUAL TO THREE-QUARTERS OF ONE PERCENT (0.75%) by weight (dry basis) [is used for fuel.];
  - (B) [(ii)] Any coal burning equipment in a commercial establishment in regular operation on or before May 1, 1975, provided THAT SUCH COAL BURNING EQUIPMENT DOES NOT COMBUST [only anthracite] coal with a sulfur content [of less than] GREATER THAN OR EQUAL TO THREE-QUARTERS OF ONE PERCENT (0.75%) by weight (dry basis) [is used for fuel] and COAL CONSUMPTION IS less than seventy-five (75) tons per year [ is consumed.]; AND

- (C) [(iii)] Any coal burning equipment used primarily for educational or historical demonstrations or exhibits[.], PROVIDED THAT SUCH COAL BURNING EQUIPMENT DOES NOT COMBUST COAL WITH A SULFUR CONTENT EXCEEDING ONE AND ONE-HALF PERCENT (1.5%) BY WEIGHT (DRY BASIS). SUCH COAL BURNING EQUIPMENT [These "sources" shall include] INCLUDES, but [are] IS not limited to, blacksmiths' forges, steam locomotives, and steamboats [provided, however, that said "sources" do not burn fuel which contains sulfur in excess of one and one-half percent (1.5%) by weight (dry basis)].
- [(b)](3) The provisions of [subsections (b)(1)(ii) and (b)(1)(v)] SUBDIVISION (1)(B) OF THIS SUBSECTION, CONCERNING GASEOUS, LIQUID OR SOLID FUEL BURNING EQUIPMENT, shall not apply to:
  - (A) [(i)] ["Standby fuel burning equipment" which is used only to provide emergency heat or power and which operates not more than a total of] ANY STANDBY FUEL BURNING EQUIPMENT OPERATING LESS THAN one hundred sixty-eight (168) hours in [any] A calendar year. [. The "Commissioner" may request such proof and reports of operations as he deems necessary.] FOR THE PURPOSE OF THIS SUBPARAGRAPH, THE TERM "OPERATING" SHALL NOT INCLUDE EMISSIONS TESTING OR OPERATING ONLY TO MAINTAIN RELIABILITY IN EMERGENCY SITUATIONS; AND
  - (B) [(ii) Gas turbines] TURBINES COMBUSTING NATURAL GAS, LIQUID FUEL OR A MIXTURE OF LIQUID FUEL AND NATURAL GAS [equipped with any smoke control apparatus which, in the "Commissioner's" judgment, is adequate to prevent visible discharge of an "opacity" greater than that designated as no. 1 on the "Ringelmann chart," or 20% "opacity."] THAT COMPLY WITH THE APPLICABLE PARTICULATE MATTER AND OPACITY LIMITATIONS SET FORTH IN SECTION 22a-174-18 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES WITHOUT UTILIZING POLLUTION CONTROL EQUIPMENT.
  - [(b)(4) The owner or "operator "of any "source" listed in subsection (b)(1) who on or before September 1, 1974 has installed and continues to properly operate a smoke and "opacity" detector and recorder not approved by the "commissioner" shall not be required to install a smoke and "opacity" monitor approved by the "commissioner" until January 1, 1985. The "Commissioner" may request such proof of date of purchase as he deems necessary.]
- (4) THE COMMISSIONER MAY, IN WRITING, REQUEST WRITTEN DOCUMENTATION FROM THE OWNER OR OPERATOR OF EQUIPMENT LISTED IN SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION TO ASCERTAIN

THE APPLICABILITY OF SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION. AN OWNER OR OPERATOR SHALL DELIVER SUCH DOCUMENTATION TO THE COMMISSIONER WITHIN THIRTY (30) DAYS OF RECEIPT OF SUCH A WRITTEN REQUEST.

[(b)(5) The "commissioner" may revoke or "modify" an exemption under subsections (a)(3), (b)(2)(ii) and (iii), (b)(3) and (b)(4) if it is determined that repeated violations of subsection 22a-174-18(a) or violations of any specific applicable conditions in these exemptions have occurred or if it is determined that operation of the "source" will prevent or interfere with the "attainment" or maintenance of applicable "ambient air quality standards," create a health hazard or create a nuisance.]

- (5) AN OWNER OR OPERATOR THAT CLAIMS SUBSECTION (b)(1) OF THIS SECTION IS NOT APPLICABLE BY VIRTUE OF COMPLIANCE WITH SUBSECTIONS (b)(2) OR (b)(3) OF THIS SECTION SHALL, UPON NOTICE FROM THE COMMISSIONER, INSTALL, OPERATE AND MAINTAIN OPACITY CEM EQUIPMENT ACCORDING TO THIS SECTION, AND COMPLY WITH SUBSECTIONS (c) AND (d) OF THIS SECTION, IF THE COMMISSIONER FINDS:
  - (A) REPEATED NONCOMPLIANCE WITH SECTION 22a-174-18 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES HAS OCCURRED;
  - (B) NONCOMPLIANCE WITH THE REQUIREMENTS, LIMITATIONS OR RESTRICTIONS SET FORTH IN SUBDIVISIONS (2) OR (3) OF THIS SUBSECTION HAS OCCURRED:
  - (C) OPERATION OF THE SUBJECT SOURCE HAS INTERFERED WITH OR IS LIKELY TO INTERFERE WITH THE ATTAINMENT OR MAINTENANCE OF AMBIENT AIR QUALITY STANDARDS, CREATE A HEALTH HAZARD OR CREATE A NUISANCE; OR
  - (D) MONITORING EQUIPMENT IS TECHNICALLY FEASIBLE, ECONOMICALLY FEASIBLE AND NEEDED TO DETERMINE COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER.
- (6) THE NOTICE PROVIDED FOR IN SUBSECTION (b)(5) OF THIS SECTION SHALL BE IN THE FORM OF A PERMIT OR ORDER AND SHALL SPECIFY REQUIREMENTS FOR OPACITY CEM EQUIPMENT INSTALLATION AND OPERATION INCLUDING A DAY BY WHICH SUCH INSTALLATION AND OPERATION IS TO COMMENCE.

## [(c) Record Keeping and Reporting.

(c)(1) The "Commissioner" may require the submission of any records or reports of

monitoring data and other information as he deems necessary to fulfill the purpose and policies contained in these regulations. Such record keeping and reporting may be required of any "point source" or any "indirect source" of "air pollution." Records and reports required by the "Commissioner" concerning "air pollutants," fuels, and operational information shall be recorded, compiled, and submitted on forms furnished or prescribed by the "Commissioner." And shall be signed or verified in writing by a ranking corporate officer or managing official with offices located in the state. Such signature shall constitute personal affirmation that such officer has exercised due diligence in verifying the accuracy of the record or report and that, to the best of his knowledge and belief, the record or report is true complete, and complies fully with applicable state requirements. Such signature shall subject the responsible official to liability for false or misleading statements.

- (c)(2) Any monitoring data required of any "source" under subsection (a) or (b) of this section shall be kept current and in a form allowing easy inspection and shall be retained by the "source" for a period of three years.
- (c)(3) The owner or "operator" of any "source" described in subsection (b)(1) with the exception of "fuel burning equipment" having a maximum gross heat input capacity of less than two hundred fifty million (250,000,000) "BTUs" per hour, shall submit to the "Commissioner" on forms furnished or prescribed by him a report summarizing "opacity" monitoring data for the preceding three months. Such reports shall be due not later than thirty (30) days following the end of each calendar quarter.

# (d) Approved Monitors

- (d)(1) The "Commissioner" shall, from time to time, publish the design, performance, and installation specifications for an approvable smoke and "opacity" monitor. No smoke and "opacity" monitor shall be considered approved until the manufacturer has submitted evidence that the monitor meets all specifications required by the "Commissioner" and until an independent laboratory verifies that a randomly selected instrument or instruments representative of the instrument for which approval is sought, meets all specifications required by the "Commissioner". The "Commissioner" reserves the right to disapprove any monitor and to revoke any previous approval if the "Commissioner" believes that the monitor will not, in fact, meet specifications.
- (d)(2)Effective April 1, 1989 for those "stationary sources" which must meet the requirements of Appendix P of Title 40 Code of Federal Regulations Part 51 an approvable smoke and "opacity" monitor shall meet the design, performance and installation specifications in Performance Specification 1 of Appendix B of Title 40 Code of Federal Regulations Part 60 and the requirements in sections 3.4.1, 3.6, 3.7, 3.8, 4.1, 4.2, 4.4, 4.5 and 4.6 in Appendix P of Title 40 Code of Federal Regulations Part 51.
- (A) In addition to the requirements of subdivision 22a-174-4(d)(1), the owner or "operator" of any "stationary source" subject to the requirements of this subdivision shall calibrate such monitoring equipment.

- (B) The information collected under this subdivision shall be used in determining compliance with the provisions of subdivision 22a-174-18(a)(1).
- (C) In addition to the reporting requirements of subdivision 22a-174-4(c)(3), the owner or "operator" of any "stationary source" subject to the requirements of this subdivision shall submit the reports listed in Appendix P of Title 40 Code of Federal Regulations Part 51 and shall include information on the total process operating time of the equipment over the three (3) preceding months.

## (e) Operation.

- (e)(1) Equipment as may be required pursuant to this section shall be maintained in operation at any time that the "source" is in operation.
- (e)(2) Except for necessary maintenance, no "person" shall deliberately shut down any monitoring device or method required under these regulations while the "source" being monitored is in operation or is emitting "air pollutants."
- (e)(3) In the case of deliberate shutdown or of a breakdown or failure of any monitoring device or method during which time the "source" will be in operation, all reasonable measures shall be taken to assure resumption of monitoring as soon as possible. In the event such shut down of monitoring equipment is expected, or may reasonably be expected, to continue for longer than 72 hours, and if the "source" is to be operated at any time during that period, the "Commissioner" shall be promptly notified in writing. Such notification shall specify the steps being taken to restore monitoring, the expected duration of the monitoring shut down, and the length of time that the "source" will be in operation during the shut down.
- (e)(4) Failure of any monitoring equipment in no way relieves the owner or "operator" of any "source" from the responsibility to comply with applicable "air pollutant" "emission" regulations or standards.
- (e)(5) It shall be a violation of these regulations to adjust or alter any monitoring device or method so as to falsify its readings or results.

# (f) "Source" Inspection.

- (f)(1) The "Commissioner" or his designated agent upon presentation of his credentials may:
  - (i) Enter at all reasonable times upon any public or private property, except a private residence, for the purpose of inspection and investigation to ascertain possible violations of these regulations, in accordance with constitutional limitations;
  - (ii) At reasonable times have access to records and may obtain copies thereof; and
  - (iii) At any reasonable time inspect any monitoring equipment or method and sample

## any "emissions."]

- (c) GENERAL OPACITY AND GASEOUS CEM EQUIPMENT OPERATION AND PERFORMANCE.
- (1) IF, FOR A SOURCE OF AIR POLLUTION, THE COMMISSIONER DETERMINES THAT OPACITY OR GASEOUS CEM EQUIPMENT IS REASONABLY AVAILABLE, TECHNICALLY FEASIBLE, ECONOMICALLY FEASIBLE AND NECESSARY FOR THE COMMISSIONER TO OBTAIN OPACITY OR EMISSION DATA TO EVALUATE COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER, THE COMMISSIONER MAY REQUIRE, BY WRITTEN NOTICE TO THE OWNER OR OPERATOR OF SUCH SOURCE, THE INSTALLATION AND OPERATION OF CEM EQUIPMENT. SUCH WRITTEN NOTICE SHALL BE IN THE FORM OF A REGULATION, PERMIT OR ORDER AND SHALL INCLUDE REQUIREMENTS FOR INSTALLATION AND OPERATION INCLUDING A DAY BY WHICH SUCH INSTALLATION AND OPERATION IS TO COMMENCE.
- (2) IF THE COMMISSIONER DETERMINES THAT CEM EQUIPMENT IS NOT REASONABLY AVAILABLE FOR A SOURCE OF AIR POLLUTION, THE COMMISSIONER MAY, BY WRITTEN NOTICE, REQUIRE THE OWNER OR OPERATOR OF SUCH SOURCE TO COMPLY WITH AN ALTERNATIVE MONITORING TECHNIQUE OR CONDUCT INTERMITTENT STACK TESTING TO VERIFY THE SOURCE IS IN COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER. SUCH WRITTEN NOTICE SHALL BE IN THE FORM OF A REGULATION, PERMIT OR ORDER AND SHALL INCLUDE THE REQUIRMENTS FOR SUCH ALTERNATIVE MONITORING OR TESTING INCLUDING A DAY BY WHICH SUCH ALTERNATIVE MONITORING OR TESTING IS TO COMMENCE.
- (3) MONITORING PLAN. UNLESS OTHERWISE SPECIFIED BY PERMIT OR ORDER OF THE COMMISSIONER, THE OWNER OR OPERATOR OF ANY SOURCE FOR WHICH CONSTRUCTION COMMENCED ON OR AFTER THE EFFECTIVE DATE OF THIS AMENDMENT TO THIS SECTION WHO IS REQUIRED TO INSTALL, OPERATE AND MAINTAIN OPACITY CEM EQUIPMENT PURSUANT TO SUBSECTION (b) OF THIS SECTION OR GASEOUS OR OPACITY CEM EQUIPMENT PURSUANT TO SUBDIVISION (1) OF THIS SUBSECTION SHALL SUBMIT TO THE COMMISSIONER FOR APPROVAL, AT LEAST SIXTY (60) DAYS BEFORE THE INITIATION OF THE PERFORMANCE SPECIFICATION TESTING REQUIRED BY SUBDIVISION (4) OF THIS SUBSECTION, A MONITORING PLAN CONTAINING THE INFORMATION SPECIFIED IN SUBPARAGRAPHS (A) THROUGH (D) OF THIS SUBDIVISION:
  - (A) A BRIEF DESCRIPTION OF THE SOURCE, INCLUDING, BUT NOT LIMITED TO, TYPE OF UNIT OR PROCESS, TYPE OF FUEL COMBUSTED, TYPE OR TYPES OF EMISSION CONTROL DEVICES, AND

## **OPERATIONAL PARAMETERS**;

- (B) A DESCRIPTION OF THE MONITORING EQUIPMENT DESIGN, PROPOSED MONITOR LOCATION AND SAMPLING SITE LOCATION. THIS DESCRIPTION SHOULD INCLUDE, BUT IS NOT LIMITED TO, FACILITY SCHEMATICS AND ENGINEERING DRAWINGS OF THE MONITORING AND SAMPLE PROBE LOCATIONS, DATA ACQUISITION SYSTEM SPECIFICATIONS, ANALYTICAL MONITORING TECHNIQUE AND SAMPLING SYSTEM DESIGN;
- (C) AN EXPLANATION OF THE PERFORMANCE SPECIFICATION TESTING TO BE CONDUCTED BY THE OWNER OR OPERATOR AS REQUIRED BY SUBDIVISION (4) OF THIS SUBSECTION; AND
- (D) A QUALITY ASSURANCE PLAN INCLUDING PROCEDURES FOR CALIBRATION, CALIBRATION DRIFT DETERMINATION AND ADJUSTMENT, PREVENTATIVE MAINTENANCE, DATA RECORDING, CALCULATION, AUDITS AND CORRECTIVE ACTION FOR MONITORING SYSTEM BREAKDOWNS.
- (4) PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE REQUIREMENTS. THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN CEM EQUIPMENT PURSUANT TO THIS SECTION SHALL MEET THE FOLLOWING PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE REQUIREMENTS:
  - (A) THE APPLICABLE PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE REQUIREMENTS OF 40 CFR 60 APPENDICES B AND F, UNLESS THE SOURCE IS SUBJECT TO 40 CFR 75, IN WHICH CASE THE OWNER OR OPERATOR SHALL MEET THE APPLICABLE PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE REQUIREMENTS OF 40 CFR 75;
  - (B) FOR OPACITY CEM EQUIPMENT, THE FOLLOWING QUALITY ASSURANCE REQUIREMENTS:
    - (i) CALIBRATION SHALL BE ADJUSTED WHENEVER THE DAILY ZERO OR UPSCALE CALIBRATION EXCEEDS PLUS/MINUS TWO PERCENT (±2%) OPACITY,
    - (ii) DATA SHALL BE INVALID FOR CALCULATING DATA
      AVAILABILITY IN ACCORDANCE WITH SUBDIVISION (5) OF
      THIS SUBSECTION IF THE ZERO OR UPSCALE CALIBRATION
      VALUE EXCEEDS EITHER THE REFERENCE ZERO OR THE
      UPSCALE CALIBRATION VALUE RECORDED DURING THE
      MOST RECENT CLEAR-PATH CALIBRATION BY PLUS/MINUS

TWO PERCENT (±2%) OPACITY FOR FIVE (5) CONSECUTIVE DAYS OR PLUS/MINUS FIVE PERCENT (±5%) OPACITY ON ANY SINGLE DAY. THE PERIOD OF INVALID DATA BEGINS WITH EITHER THE FIFTH CONSECUTIVE OCCURRENCE OF A DRIFT VALUE EXCEEDING PLUS/MINUS TWO PERCENT (±2%) OPACITY OR WITH THE LAST DAILY CHECK PRECEDING THE SINGLE OCCURRENCE OF A DRIFT VALUE EXCEEDING PLUS/MINUS FIVE PERCENT (±5%) OPACITY. THE PERIOD OF INVALID DATA SHALL END WHEN A CALIBRATION DRIFT CHECK, CONDUCTED AFTER CORRECTIVE ACTION, DEMONSTRATES THAT RELIABLE MONITORING DATA IS BEING GENERATED,

- (iii) QUALITY ASSURANCE AUDITS SHALL BE CONDUCTED DURING
  EACH CALENDAR QUARTER IN WHICH THE SOURCE OPERATES.
- (iv) THE COMMISSIONER SHALL BE NOTIFIED, IN WRITING, NO FEWER THAN THIRTY (30) DAYS PRIOR TO THE INITIALLY PROPOSED QUALITY ASSURANCE AUDIT, AND
- (v) OUALITY ASSURANCE AUDITS SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURES CONTAINED IN "PERFORMANCE AUDIT PROCEDURES FOR OPACITY MONITORS," EPA DOCUMENT NO. 450/4-92/010, DATED APRIL 1992. IF EPA PROMULGATES QUALITY ASSURANCE PROCEDURES IN 40 CFR 60, APPENDIX F, QUALITY ASSURANCE AUDITS SHALL BE CONDUCTED ACCORDING TO SUCH PROCEDURES. IF EITHER EPA DOCUMENT NO. 450/4-92/010 OR SUBSEQUENTLY PROMULGATED PROCEDURES IN 40 CFR 60. APPENDIX F, AS APPLICABLE, DOES NOT CONTAIN AUDIT PROCEDURES FOR THE OPACITY CEM SELECTED BY THE OWNER OR OPERATOR, THE OWNER OR OPERATOR SHALL, IN WRITING, PROPOSE AUDIT PROCEDURES TO THE COMMISSIONER FOR REVIEW AND WRITTEN APPROVAL AT LEAST THIRTY (30) DAYS PRIOR TO THE INITIAL OPACITY CEM AUDIT; AND
- (C) IF THE RESULTS OF A QUALITY ASSURANCE AUDIT FAIL TO CONFORM TO THE QUALITY ASSURANCE REQUIREMENTS OF SUBPARAGRAPH (B) OF THIS SUBDIVISION, SUCH OPACITY CEM DATA SHALL BE DEEMED INVALID BY THE COMMISSIONER, AND THE OWNER OR OPERATOR WILL BE DEEMED TO HAVE FAILED THE QUALITY ASSURANCE AUDIT. DATA COLLECTED AFTER ANY FAILED QUALITY ASSURANCE AUDIT SHALL BE INVALID FOR

CALCULATING PERCENT DATA AVAILABILITY IN ACCORDANCE WITH SUBDIVISION (5)(A) OF THIS SUBSECTION.

- (5) DATA AVAILABILITY.
  - (A) THE OWNER OR OPERATOR OF ANY SOURCE REQUIRED TO INSTALL, OPERATE AND MAINTAIN CEM EQUIPMENT IN ACCORDANCE WITH THIS SECTION SHALL MEET THE FOLLOWING DATA AVAILABILITY REQUIREMENTS ON AN EMISSION LIMITATION-SPECIFIC BASIS:
    - (i) WHILE THE SOURCE IS OPERATING, THE OWNER OR OPERATOR SHALL OPERATE REQUIRED CEM EQUIPMENT PURSUANT TO SECTION 22a-174-7(b) OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES, AND ALLOWABLE PERIODS OF MISSING DATA SHALL APPLY ONLY TO PERIODS OF DELIBERATE SHUTDOWN ALLOWED BY SECTION 22a-174-7(b) OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES, UNAVOIDABLE SYSTEM MALFUNCTION OR AS OTHERWISE PROVIDED UNDER THIS SUBDIVISION,
    - (ii) EXCEPT AS PROVIDED IN SUBPARAGRAPHS (B) AND (C) OF THIS SUBDIVISION, FOR OPACITY EMISSIONS, DATA SHALL BE AVAILABLE FOR NO LESS THAN NINETY-FIVE PERCENT (95%) OF THE TOTAL OPERATING HOURS OF THE SOURCE IN ANY CALENDAR QUARTER,
    - (iii) EXCEPT AS PROVIDED IN SUBPARAGRAPHS (B) AND (C) OF THIS SUBDIVISION, FOR AIR POLLUTANT EMISSIONS OTHER THAN OPACITY, DATA SHALL BE AVAILABLE FOR NO LESS THAN NINETY PERCENT (90%) OF THE TOTAL OPERATING HOURS OF THE SOURCE IN ANY CALENDAR QUARTER, AND
    - (iv) PERCENT DATA AVAILABILITY SHALL BE CALCULATED USING THE FOLLOWING EQUATION:

% Data Availability = 
$$\left(\frac{\text{Unit Operating Time-Monitoring Downtime}}{\text{Unit Operating Time}}\right) * 100$$

WHERE:

UNIT OPERATING TIME = TOTAL HOURS OF SOURCE OPERATION AT ANY LEVEL DURING THE CALENDAR QUARTER.

MONITORING DOWNTIME = TOTAL HOURS OF SOURCE OPERATION AT ANY LEVEL DURING THE CALENDAR QUARTER WHERE EITHER NO CEM
EQUIPMENT DATA WAS COLLECTED OR THE
CEM EQUIPMENT DATA WAS INVALID. SUCH
PERIODS INCLUDE, BUT ARE NOT LIMITED
TO, QUALITY ASSURANCE ACTIVITIES SUCH
AS CALIBRATION, PREVENTATIVE
MAINTENANCE, AND CALIBRATION DRIFT
EXCEEDANCES OR QUALITY ASSURANCE
AUDITS THAT RESULT IN INVALID DATA.

- (B) THE COMMISSIONER, IN WRITING, MAY EXEMPT THE OWNER OR OPERATOR OF A SOURCE FROM THE MINIMUM DATA AVAILABILITY REQUIREMENTS OF SUBPARAGRAPHS (A)(ii) AND (A)(iv) OF THIS SUBDIVISION IF SUCH SOURCE IS EQUIPPED WITH PROPERLY OPERATING OPACITY CEM EQUIPMENT, AND THE SOURCE IS OPERATED LESS THAN OR EQUAL TO FIVE HUNDRED FOUR (504) HOURS IN THE CALENDAR QUARTER.
- (C) THE COMMISSIONER, IN WRITING, MAY EXEMPT THE OWNER OR OPERATOR OF A SOURCE FROM THE MINIMUM DATA AVAILABILITY REQUIREMENTS OF SUBPARAGRAPHS (A)(iii) AND (A)(iv) OF THIS SUBDIVISION IF SUCH SOURCE IS EQUIPPED WITH PROPERLY OPERATING GASEOUS CEM EQUIPMENT, AND THE SOURCE IS OPERATED LESS THAN OR EQUAL TO THREE HUNDRED THIRTY-SIX (336) HOURS IN THE CALENDAR QUARTER.
- (D) TO OBTAIN AN EXEMPTION UNDER SUBPARAGRAPHS (B) OR (C) OF THIS SUBDIVISION, THE OWNER OR OPERATOR OF THE SOURCE SHALL SUBMIT THE FOLLOWING INFORMATION TO THE COMMISSIONER WITHIN THIRTY (30) DAYS FOLLOWING THE LAST DAY OF THE CALENDAR QUARTER FOR WHICH THE EXEMPTION IS SOUGHT:
  - (i) A REQUEST FOR AN EXEMPTION FOR A SPECIFIED CALENDAR QUARTER,
  - (ii) THE ACTUAL OPERATING HOURS OF THE SOURCE DURING THE CALENDAR QUARTER,
  - (iii) THE DURATION OF AND NATURE OF THE CEM EQUIPMENT BREAKDOWNS, REPAIRS OR ADJUSTMENTS MADE DURING THE CALENDAR QUARTER, AND
  - (iv) THE ACTUAL DATA AVAILABILITY ACHIEVED DURING THE CALENDAR QUARTER.

## (d) RECORD KEEPING AND REPORTING.

- (1) THE COMMISSIONER MAY, BY WRITTEN NOTICE, REQUIRE THE OWNER OR OPERATOR OF ANY SOURCE TO CREATE, MAINTAIN AND SUBMIT DATA, RECORDS OR REPORTS OF MONITORING DATA AND OTHER INFORMATION DEEMED NECESSARY BY THE COMMISSIONER TO EVALUATE COMPLIANCE WITH CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER. SUCH INFORMATION SHALL BE RECORDED, COMPILED AND SUBMITTED ON FORMS AS MAY BE FURNISHED OR PRESCRIBED BY THE COMMISSIONER. THE WRITTEN NOTICE SHALL PROVIDE THE DATE BY WHICH SUCH DATA, RECORDS OR REPORTS SHALL BE SUBMITTED TO THE COMMISSIONER.
- (2) ANY DOCUMENT, DATA, PLAN, RECORD OR REPORT REQUIRED TO BE SUBMITTED TO THE COMMISSIONER BY THIS SECTION SHALL INCLUDE A CERTIFICATION SIGNED BY A RESPONSIBLE CORPORATE OFFICER OR A DULY AUTHORIZED REPRESENTATIVE OF SUCH OFFICER, AS THOSE TERMS ARE DEFINED IN SUBDIVISION (2) OF SUBSECTION (b) OF SECTION 22a-430-3 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES, AND BY THE INDIVIDUAL OR INDIVIDUALS REPONSIBLE FOR ACTUALLY PREPARING SUCH DOCUMENT, EACH OF WHOM SHALL EXAMINE AND BE FAMILIAR WITH THE INFORMATION SUBMITTED IN THE DOCUMENT AND ALL ATTACHMENTS THERETO, AND SHALL MAKE INQUIRY OF THOSE INDIVIDUALS RESPONSIBLE FOR OBTAINING THE INFORMATION TO DETERMINE THAT THE INFORMATION IS TRUE, ACCURATE AND COMPLETE, AND EACH OF WHOM SHALL CERTIFY IN WRITING AS FOLLOWS:

"I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ATTACHMENTS THERETO, AND I CERTIFY THAT BASED ON REASONABLE INVESTIGATION, INCLUDING MY INQUIRY OF THOSE INDIVIDUALS RESPONSIBLE FOR OBTAINING THE INFORMATION, THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I UNDERSTAND THAT ANY FALSE STATEMENT MADE IN THE SUBMITTED INFORMATION MAY BE PUNISHABLE AS A CRIMINAL OFFENSE UNDER SECTION 22a-175 OF THE CONNECTICUT GENERAL STATUTES OR, IN ACCORDANCE WITH SECTION 22a-6 OF THE CONNECTICUT GENERAL STATUTES, UNDER SECTION 53a-157b OF THE CONNECTICUT GENERAL STATUTES, AND IN ACCORDANCE WITH ANY OTHER APPLICABLE STATUTE."

(3) THE OWNER OR OPERATOR OF ANY SOURCE SUBJECT TO THE PROVISIONS OF CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS ADOPTED THEREUNDER SHALL MAINTAIN ALL DATA,

- DOCUMENTS AND REPORTS REQUIRED BY THIS SECTION IN A LEGIBLE AND COMPREHENSIBLE FORM FOR FIVE (5) YEARS FROM THE DATE SUCH DATA, DOCUMENT OR REPORT IS CREATED.
- (4) EACH CALENDAR QUARTER, THE OWNER OR OPERATOR OF ANY OPACITY CEM EQUIPMENT REQUIRED PURSUANT TO THIS SECTION SHALL SUBMIT THE FOLLOWING INFORMATION TO THE COMMISSIONER:
  - (A) THE DATA OBTAINED THROUGH SUCH EQUIPMENT DURING THE PRECEDING CALENDAR QUARTER THAT IS REQUIRED TO DETERMINE COMPLIANCE WITH AN EMISSION LIMITATION OR STANDARD;
  - (B) A SUMMARY OF SUCH DATA;
  - (C) A COPY OF THE QUALITY ASSURANCE AUDIT CONDUCTED FOR THAT CALENDAR OUARTER; AND
  - (D) A SUMMARY OF ALL CORRECTIVE ACTIONS TAKEN IN RESPONSE TO A FAILED CEM EQUIPMENT AUDIT.
- (5) SUBMISSIONS MADE TO COMPLY WITH SUBDIVISION (4) OF THIS SUBSECTION SHALL BE MADE NO LATER THAN THIRTY (30) DAYS FOLLOWING THE END OF EACH CALENDAR QUARTER.
- (e) THE COMMISSIONER MAY EXEMPT AN OWNER OR OPERATOR OF A SOURCE SUBJECT TO THIS SECTION FROM THE REQUIREMENTS OF THIS SECTION AS THEY APPLY TO A PARTICULAR AIR POLLUTANT IF SUCH OWNER OR OPERATOR DEMONSTRATES IN WRITING, FOR THE COMMISSIONER'S WRITTEN APPROVAL, THAT SUCH SOURCE IS PHYSICALLY INCAPABLE OF VIOLATING ANY APPLICABLE REQUIREMENT FOR SUCH AIR POLLUTANT SET FORTH IN CHAPTER 446c OF THE CONNECTICUT GENERAL STATUTES AND REGULATIONS PROMULGATED THEREUNDER.
- (f) UPON WRITTEN NOTICE IN THE FORM OF A PERMIT OR ORDER TO AN OWNER OR OPERATOR OF A SOURCE GRANTED AN EXEMPTION UNDER SUBSECTION (e) OF THIS SECTION, SUCH OWNER OR OPERATOR SHALL INSTALL, OPERATE AND MAINTAIN CEM EQUIPMENT IN ACCORDANCE WITH SUCH NOTICE IF:
- (1) THE COMMISSIONER DETERMINES THERE IS REPEATED NONCOMPLIANCE WITH SECTION 22a-174-18 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES;
- (2) OPERATION OF THE SUBJECT SOURCE HAS INTERFERED WITH OR IS LIKELY TO INTERFERE WITH THE ATTAINMENT OR MAINTENANCE OF AMBIENT AIR

- QUALITY STANDARDS, CREATE A HEALTH HAZARD OR CREATE A NUISANCE; OR
- (3) THE SOURCE HAS BEEN ALTERED OR THE OPERATIONS OF THE SOURCE HAVE CHANGED SUCH THAT SUBSECTION (e) OF THIS SECTION IS NO LONGER APPLICABLE.

**STATEMENT OF PURPOSE:** This amendment serves to (1) incorporate relevant portions of the Department's Continuous Emission Monitoring Guideline; (2) revise overall format for consistency with current Department and Legislative Commissioner's Office practices; (3) clarify language as necessary; and (4) remove general monitoring equipment operating requirements to a corresponding amendment to Regulations of Connecticut State Agencies section 22a-174-7.