#### **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 the Amendment of Section 22a-174-38 of the Regulations of Connecticut State Agencies Municipal Waste Combustors

> Merrily A. Gere Hearing Officer

Date of Hearing: November 7, 2007

On September 14, 2007, the Commissioner of the Department of Environmental Protection (Commissioner and Department, respectively) signed a notice of intent to amend section 22a-174-38 (Section 38) of the Regulations of Connecticut State Agencies (RCSA) concerning municipal waste combustors (MWCs). Pursuant to such notice, a public hearing was held on November 7, 2007, and the public comment period closed November 9, 2007. The amended version of Section 38 will be submitted to the U. S. Environmental Protection Agency (EPA) for review and approval as a revision to the state plan to implement and enforce federal requirements for large and small MWCs pursuant to section 129 of the Clean Air Act (CAA).

#### I. Hearing Report Content

As required by section 4-168(d) of the Connecticut General Statutes (CGS), this report describes the proposal; the principal reasons in support of and in opposition to the proposal; and summarizes and responds to all comments on the proposal. A final recommended version of the amendment, inclusive of changes recommended in response to comment, is also provided.

A statement in satisfaction of CGS section 22a-6(h) is located in Attachment 1 to this report.

#### II. Purpose and Summary of the Proposal

Section 38 is based on federal emissions guidelines and new source performance standards (NSPS), which EPA originally promulgated in 1995 to address the air quality impacts of municipal waste combustion. Section 38 is approved by EPA as the enforceable mechanism of Connecticut's state plan for MWCs under CAA section 129. This amendment serves the primary purpose of updating the regulation in accordance with revisions to the large MWC emissions guidelines and NSPS, which were promulgated on May 10, 2006 (71 FR 27324). In addition, the proposal removes requirements for new MWC units, as such requirements are redundant to the

independently applicable NSPS; strengthens air pollution control equipment record keeping requirements; exempts units subject to Section 38 from the requirements of RCSA 22a-174-22; designates an end to the creation and use of emission reduction credits (ERCs); and updates the format to the Department's current conventions.

The text of the proposal is located in Attachment 2 to this report.

#### III. Principal Considerations in Opposition to the Proposal

No comments opposed moving the amendment forward to seek promulgation. Some commenters did oppose the proposed inclusion of two new record keeping requirements in subsection (k). These new subdivisions, (k)(12) and (k)(13), have no corollary requirements in the May 2006 Federal rule revisions.

A detailed discussion of the comments and responses is set out in the next section of this report.

#### **IV.** Summary of Comments

All comments submitted are summarized below with the Department's responses. Commenters are identified by number in this section and are identified fully at the corresponding number in the list that is Attachment 3 to this report. When changes to the proposed text are indicated in response to comment, new text is in bold font and deleted text is in strikethrough font.

#### Subsection (c), Mercury emission limit

Comment 1. The Department appears to be federalizing the state-only enforceable mercury limit of 28 ug/dscm 7% O2, or 85% removal, rather than the revised Subpart Eb/Cb limit of 50 ug/dscm 7% O2, or 85% removal. The current EPA-approved state plan for Connecticut does not include the lower state enforceable limit. [2, 3]

<u>Response</u>: The Department does not intend to submit the mercury limit of 28 ug/dscm, or 85% removal, for approval into the state plan. Consistent with previous state plan revisions, the intention to maintain the state-only enforceable status of that mercury emission limit will be stated within the submission to EPA of a MWC state plan revision that includes the final revised text of Section 38.

#### Subsection (d), Emission reduction credits

Comment 2: EPA notes that Section 38(d)(5)(C) allows MWCs to create ERCs until January 1, 2009. Section 38(d)(12) allows MWCs to use ERCs to comply with their nitrogen oxides (NOx) emission limits until May 1, 2013. In contrast, a recent draft of an amendment to RCSA section 22a-174-22 allows the creation and use of ERCs until January 1, 2012 (see subsections (j)(2) and (j)(11)). EPA urges the Department to make the deadline for ERC use and creation consistent in all Department rules. [1]

Response: EPA correctly identifies an inconsistency in the end to creation and use in this proposal versus that of a proposal to amend RCSA section 22a-174-22. The two programs are related only in that ERCs created under Section 38 may be used for compliance with the requirements of RCSA section 22a-174-22. Despite this relationship, the two emission reduction credit programs are complete and independent; the use of credits created under Section 38's program are not necessary to the integrity of the emission credit program under RCSA section 22a-174-22. Thus, the Department

should maintain the proposed end to Section 38's ERC trading program without regard to the proposed amendment of RCSA section 22a-174-22. In sum, the Department should not revise Section 38 in response to this comment.

#### Subsection (g) – Operating practices

Comment 3. The Department should incorporate into Section 38 the May 10, 2006 Federal rule revisions provided in 40 Code of Federal Regulations (CFR) 60.58b(g)(5)(ii), 60.58b(i)(8) and (9) and 60.68b(m)(ii). These clarifications specify how an owner or operator should apply the maximum MWC unit load limit, maximum particulate control device inlet temperature limit and minimum carbon feed rate limit to all similar units at a MWC plant when only one MWC unit is tested for dioxins/furans under the reduced test schedule provided in Section 38(i)(3).

The Department should add these Federal requirements as new subsection (g)(6), as follows:

(6) Notwithstanding subsections (2), (3) and (5) of this subdivision, if a subsequent dioxin/furan test is being performed on only one MWC unit at a MWC plant as provided for in subdivision (i)(3), the owner or operator of a MWC plant may elect to apply the same maximum particulate control device inlet temperature, maximum MWC unit load and minimum carbon feed rate from the tested MWC unit to all the similarly designed and operated MWC units at the MWC plant in accordance with 40 CFR 60.58b(g)(5)(ii), 60.58b(i)(8) and (9), and 60.58b(m)(ii). [2, 3, 4]

Response: The Department should not revise Section 38 as recommended in the comment. The Department does not agree with EPA's approach to data substitution at a facility when a single unit is tested for dioxin/furans under the reduced test schedule provided in Section 38(i)(3). Substituting the maximum particulate control device inlet temperature, maximum MWC unit load and minimum carbon feed rate from the tested MWC unit to all the similarly designed and operated MWC units at the MWC plant does not necessarily yield a beneficial environmental result.

Further, the Department should not include the provisions of 40 CFR 60.58b(g)(5)(ii) in Section 38, as recommended by the commenters, as those clarifications are unnecessary given that existing subsection (g)(4) provides the Commissioner the necessary ability to waive operating parameters to allow evaluation of system performance, testing of new technology or diagnostic testing.

#### Subsection (h) – Operator training and certification

Comment 4: The Department should revise the operator training and staffing requirements of subsection (g) to provide additional flexibility, consistent with the May 10, 2006 Federal rule revisions (see 40 CFR 60.54b). Such flexibility is particularly important during the period after certified operators leave the facility for new employment and before new operators are hired, trained and certified under RCSA section 22a-231-1. That same flexibility is also important should a certified operator fall ill or use family leave time.

Specifically, the Department should add requirements similar to subsections (c)(2) and (3) in 40 CFR 60.54b, which allow the facility to operate temporarily without a certified chief operator or

The referenced amendment of RCSA section 22a-174-22 has been suspended for reformulation.

shift supervisor under the following scenarios: 1) up to two weeks provided those periods are reported in the annual report, and 2) longer than two weeks if written notification is provided to the Department that specifies the reasons a certified chief operator or shift supervisor cannot be onsite at all times. Such written notification would include corrective actions for expeditiously restoring coverage. Under the second scenario, status reports are required to be submitted every four weeks summarizing actions taken to restore certified staff coverage with provisions for the Department to disapprove. We recognize the above changes to subsection (h) may require simultaneous revisions to RCSA 22a-231-1 as well. [2, 3, 4]

Response: The Commissioner should not revise the proposed amendment in response to this comment. As the commenters acknowledge, the operator training and certification requirements that are approved in Connecticut's State Plan to Implement the Large and Small Municipal Waste Combustor Emission Guidelines and New Source Performance Standards are those of Connecticut's solid waste facility operator certification and training program, as set out in RCSA section 22a-231-1. *See:* <a href="http://www.ct.gov/dep/cwp/view.asp?a=2718&q=325466&depNav\_GID=1646">http://www.ct.gov/dep/cwp/view.asp?a=2718&q=325466&depNav\_GID=1646</a> That regulation sets the standards for the Department's training and certification of MWC personnel.

Subsection (c) of RCSA section 22a-231-1 specifies on-site supervision requirements for certified chief operators and shift operators, restrictions on operation of a facility after the loss of services of a chief operator and notification requirements for replacement or loss of certified operators. Any revisions to the requirements of RCSA section 22a-231-1 would be made to improve the Department's solid waste training program and would require a public notice, hearing and comment process in full satisfaction of chapter 54 of general statutes.

<u>Subsection (k)(12) – Record keeping requirements: control device operating parameters</u>

<u>Comment 5.</u> The Department should not adopt new subsection (k)(12). [2, 3, 4] The federal rule does not include any such requirements because they are not useful to the Department to determine compliance and are an additional burden on the source operators. [4]

Response: New subsection (k)(12) mirrors, to some extent, the Federal record keeping requirements for mercury air pollution control equipment. By establishing with some specificity the record keeping requirements for reagent usage, subsection (k)(12) will improve the consistency of air pollution control device records available to the Department. Such information allows the Department to determine, for pollutants not monitored by continuous emissions monitoring (CEM), whether emissions comply with emissions limitations or are emitted throughout the year at levels consistent with stack test results. As records of air pollution control equipment parameters are often used by regulatory authorities to determine if equipment is operated properly and as most of the permits issued to Connecticut MWC owners and operators include similar requirements, subsection (k)(12) does not create an undue burden beyond existing permit language.

For these reasons, subsection (k)(12) should be adopted in some form. However, the final requirements of subsection (k)(12) should be modified to some extent in response to comment. See the response to comment 9 for the recommended final text.

<u>Comment 6</u>: If the Department feels compelled to add the air pollution control monitoring requirements proposed in subsection (k)(12), we suggest that these new requirements be made state-only enforceable and not included in the state plan revision submitted to EPA. [2, 3]

<u>Response:</u> The Department does not intend to submit subsection (k)(12) for approval in the state plan. Consistent with previous MWC state plan submissions and revisions, the Department will not request approval of requirements that are more stringent than the underlying Federal emissions guidelines unless such requirements are necessary for attainment of national standards or to meet other Federal requirements.

Comment 7: Proposed subsection (k)(12) is not in the spirit of the Department's initiatives that focus on environmental outcomes. [4]

<u>Response</u>: The environmental theme to which the commenter refers is *Making Doing the Right Thing the Path of Least Resistance*. This theme is a reminder to the Department to take action based on environmental outcomes. A key component of this theme is a focus on strong enforcement and compliance, and the proposed record keeping requirements are entirely consistent with the theme. The requirements not only provide regulatory certainty and consistency but also enhance the Department's ability to verify proper operation of air pollution control equipment.

Comment 8. Monitoring reagent feed rates, as proposed in subparagraphs (A) and (B) of subsection (k)(12), does not provide any meaningful information. [2] Section 38 now includes necessary requirements to record reagent feed rates for those pollutants that are not monitored continuously. For example, carbon feed rate is recorded as required by subsections (g)(5), (c)(13), (i)(4)(K) and others. Inlet temperature for the particulate control device is recorded pursuant to subsections (g)(1), (j)(1) and (k)(3)(E). [4]

Response: Reagent use over time is a useful indicator of emissions for pollutants that are not monitored continuously. As one commenter notes, Section 38 does specify certain reagent use record keeping requirements, but those requirements do not include all the reagent use data that the Department believes could be important to determining compliance and identifying potential air quality problems. For example, use of urea or ammonia in a selective non-catalytic reduction system will affect particulate and ammonia emissions. Simply because the CEM shows compliance for NOx emission limits does not mean that particulate and ammonia emissions are in compliance with applicable emission standards or are emitted at levels consistent with stack test results. An example of this occurred during emissions testing at Connecticut Resource Recovery Authority's (CRRA's) Mid-Connecticut facility in January 2002. While the emissions of NOx on Mid-Connecticut unit 11 complied with the applicable emission rate, the annualized emissions of ammonia exceeded the fifteen-ton per year regulatory limit. By requiring the monitoring and recording of such data, the Department has reasonable assurance that the stack test data is representative of operations throughout the year and may identify situations in which additional data collection and analysis is warranted.

Therefore, the Department should not revise Section 38 in response to this comment.

Comment 9. Commenters stated three objections against the inclusion of new subparagraph (D) in subsection (k)(12), which requires operators to record air pollution control equipment operating parameter data other than air pollutant emissions data:

- Individual air permits to construct/Title V and/or solid waste permits already incorporate facility-specific air pollution control device operating parameter-monitoring requirements based on the permitting engineer's understanding of device design and operation; the Department permitting engineer is best able to determine which air pollution control device operating parameters makes sense to monitor. For instance, monitoring pressure drop across a spray dryer absorber makes little sense since it has no relationship to acid gas control. [2, 3]
- The Department would not find this information useful to determine whether or not the pollution control equipment is properly controlling the target pollutants. The primary indication of the proper functioning of air pollution control equipment is a direct measurement of whether, and to what extent, the equipment reduces pollution. No other indications are relevant, particularly as other parameters vary with changes in the level of uncontrolled emissions, boiler operation and fuel content. [4]
- The language leaves open to interpretation what the "primary indicators of proper functioning" are, potentially resulting in voluminous records of insignificant data or reports of data already available to the Department through other means. [5]

Response: The comment asserting that the direct measurement of pollutant reduction by air pollution control equipment is the best indication of proper functioning is accurate -- at the moment of measurement. For pollutants that are measured by annual, semiannual or quarterly stack testing, air pollution control device operating parameters are a useful indication of whether or not such pollutants are continuing to be emitted at levels below emissions limits during the bulk of the operating time when such pollutants are not directly measured. Of course, no single parameter will in itself definitively indicate the level of pollutant emissions, but such data is useful to the Department to assess whether additional investigation is needed.

Air pollution control device operating parameters such as pressure drop across the system may be particularly helpful to determine whether or not particulate matter is controlled adequately between stack test measurements. Particulate matter control is a particular concern at this time given the need to comply with federal standards for fine particulate matter and regional haze requirements.

That stated, proposed subparagraph (D) is general in nature and does not enhance the current ability of the Department to include facility-specific air pollution control device operating parameter-monitoring requirements in MWC operating permits. Thus, at this time, the Department should not include the requirements of subparagraph (D) in the final text of this amendment. The Department should consider a future proposal to enhance particulate matter compliance determinations by requiring particulate matter-specific air pollution control device operating parameter monitoring or requiring the installation of bag house leak detectors. To the extent an owner or operator has the ability to specify the appropriate operating parameters, such specification should be included in the intent-to-test submission required by Section 38(1)(4).

In the final version of Section 38, subparagraphs (A) through (C) of proposed subsection (k)(12) should be retained and proposed subparagraph (D) should be eliminated, as follows:

- (12) For each MWC unit, the following records **of air pollution control device operation** shall be maintained:
  - (A) For each reagent, the feed rate to the air pollution control device, measured in kilograms per hour or pounds per hour, during the annual particulate emissions performance tests, with supporting calculations;
  - (B) For each reagent, the feed rate to the air pollution control device, measured in kilograms per hour or pounds per hour, for each hour of operation, with supporting calculations; **and**
  - (C) For each calendar quarter, total reagent usage for each MWC unit in kilograms or pounds for each calendar quarter; and .
  - (D) Air pollution control equipment operating parameter data other than air pollutant emissions data for the parameter(s) that is the primary indicator(s) of proper functioning of the air pollution control equipment (e.g., pressure drop across system, static charge, reagent feed rate, pH) for each hour of operation.

<u>Comment 10:</u> The Department should avoid creating conflicts with air pollution control device parametric monitoring already established in permits by adding the following subparagraph (E) to proposed subsection (k)(12):

Notwithstanding the recordkeeping requirements specified in subsections (A), (B), (C) and (D) above, record keeping requirements of air pollution control device reagent feed rates and other operating parameters established in operating permits shall take precedent.

This new subsection would create minimum record keeping requirements for those MWC units that do not have defined and carefully considered requirements already in permits and would not create a new unnecessary record keeping burden for plants with already established requirements. [2, 3]

Response: The Department should not include subparagraph (E) as recommended by the commenters. First, subparagraphs (A) through (C), which are recommended for inclusion in the final draft of the amendment, are clear requirements that apply regardless of the record keeping requirements currently included in MWC operating permits. As explained in the responses to comments 8 and 9, the Department considers that information a useful addition to the existing record keeping requirements. If the same information is now required in an operating permit, the owner has satisfied the regulatory requirements and does not need to retain additional records. For those MWC units that do not have requirements equivalent to subparagraphs (A) through (C) in an operating permit, the owner must maintain such records on and after the effective date of this amendment. The recommended subparagraph (E) is not necessary.

To the extent the commenters recommended subparagraph (E) in response to the lack of specificity of proposed subparagraph (D), the subparagraph is not necessary. *See* the response to comment 9.

#### Subsection (k)(13) – Record keeping requirements: daily charge and fuel usage rates

Comment 11. Subsection (k)(13) requires recording of daily charge rates, daily fuel usage rates and daily hours of operation as well as recording of charge and fuel usage rates as fired during each test run for each MWC unit. The Department should delete subsection (k)(13) as it is not required by the federal rule update, and the Department has not provided any justification for the provision. [2, 3, 4, 5] Specific objections to the additional requirements of subsection (k)(13) include:

- Daily charge rates are not appropriate for MWCs because there is no method to weigh the municipal solid waste fed to the boiler. [4, 5] A MWC facility relies on weight receipts, pit inventories and steam produced to estimate charging rates. Hourly (and daily) rates associated with individual stack test runs are simply not accurate given the inherent errors in measuring pit inventory and the variations in the fuel. [5]
- Unlike incinerators fueled by a homogeneous fuel, air emissions from MWCs are not as tightly correlated with charge rate, since municipal solid waste has a variable content of combustible versus non-combustible materials and materials of varying heat production. [4]
- EPA recognized that daily charge rate data for MWCs is not useful when it exempted the MWCs from the requirements of 40 CFR 60 Subpart E in the May 10, 2006 Federal rule revisions. [4]
- Steam flow or feed water flow are better indicators of short-term firing rates than are charge rates. Federal regulations and Section 38 require continuous hourly monitoring of this parameter. [2, 3, 4, 5]
- From its NSR permitting process, CRRA understands that the Department is interested in short-term charge rates to prevent too much waste from being processed; steam production rates are not an adequate substitute for short-term charge rates if the heat transfer surfaces are fouled. As a result, rather than short-term charge rate data, CRRA's permit for the Mid-Connecticut facility requires monitoring and cleaning of the heat transfer surfaces at least two times per year. [4]
- Subsection (k)(13) requires record keeping that is redundant to existing information. Hours of operation and auxiliary fossil fuel usage rates are recorded for other purposes, although fuel usage rates are not necessarily recorded daily. [4]
- Individual permits and Title V permits establish plant-specific requirements for MWC throughput and auxiliary fuel firing rate monitoring on a monthly or longer basis. [2, 3, 4]

Response: The majority of the comment in opposition to the inclusion of new subsection (k)(13) is based on the proposed requirement for owners and operators to record daily charge rates. While comment suggests that there is no justification for inclusion of the daily charge rate record keeping and that it is not possible to weigh the municipal solid waste fed to a boiler, prior to May 10, 2006 the owners of MWCs with a charging rate of more than 50 tons per day were required by Federal regulation to record daily charging rates and hours of operation. See 40 CFR 60.53 Subpart E, Standards of performance for incinerators. The May 10, 2006 Federal rulemaking that updated the NSPS and

emissions guidelines for MWCs eliminated the owners of MWCs from the requirement to comply with 40 CFR 60 Subpart E. Therefore, proposed subdivision (13) in part merely retains pre-existing federal requirements.

However, just as EPA eliminated MWC owners and operators from 40 CFR 60 Subpart E, and given the apparent burden that such record keeping has created for the MWC owners and operators, the Department will accept records of steam production as substitute, given that the permitting process offers the Department the opportunity to require owners and operators to monitor and clean heat transfer surfaces, record other parameters or take other facility-specific actions to ensure that steam production rate serves as an adequate indicator that an MWC is charged and operated properly.

To increase the value of the steam production rate data as well as other operating parameter data, the Department should maintain the proposed record keeping for daily hours of operation and auxiliary fuel use. Most MWC operating permits now include similar requirements, and the MWC owners and operators must maintain such information to serve other purposes (*e.g.*, hours of operation are necessary to determine compliance with CEM data availability requirements). Thus, specific requirements for recording hours of operation and auxiliary fuel use will improve the consistency of record keeping requirements and ensure that the Department has access to information necessary to determine whether MWC facilities are operated properly.

The final version of Section 38 should clearly state the daily record keeping requirements for each unit by including the following version of subsection (k)(13), as follows:

- (13) The daily charge rates, daily fuel usage rates for each fuel and hours of operation shall be recorded daily for each MWC unit. Charge and fuel usage rates shall be recorded as fired during each test run for each MWC unit. For each MWC unit, the following records shall be recorded daily:
  - (A) Daily fossil fuel usage rates for each fuel; and
  - (B) Daily hours of operation, in which periods of startup and shutdown are distinguished.

Comment 12: If the Department feels compelled to add MWC charge rate-monitoring requirements, we suggest that these new requirements be made state-only enforceable and not included in the state plan revision submitted to EPA. This will provide the Department flexibility in enforcing the requirements. More important, the Department should avoid creating conflicts with MWC charging rate monitoring already established in permits by adding the following clarification to section (k)(13):

Notwithstanding the above record keeping requirements, fuel and charging rate record keeping requirements established in operating permits and approved stack test protocols shall take precedent.

With this clarification, the new subdivision would create minimum record keeping requirements for those MWC plants that do not have defined and carefully considered requirements already in permits, yet would not create a new unnecessary record keeping and enforcement exposure burden for plants with already established requirements. [2, 3]

<u>Response</u>: Given the recommendation not to proceed with the addition of short-term charge rate monitoring (*see* the response to comment 11), the commenter's concerns are moot. The Department should not revise Section 38 in response to this comment.

#### V. Minor Revisions Recommended by Hearing Officer

In addition to revisions to the proposal recommended in the comment and response in Section IV of this report, the Hearing Officer recommends the following minor revisions also be included in the final version of Section 38. The revisions identified below improve the consistency and clarity of the section without revising the meaning or effect of Section 38's requirements.

• In the title of Table 38-1, the phrase "for existing MWCs" should be eliminated as it is not necessary and is not defined. As a result, the title of Table 38-1 should read as follows:

## Table 38-1. Air Pollutant Emission Limits for Existing MWCs [for which Construction Commenced Prior to September 20, 1994].

- In Section 38(c)(1), the word "Tables" should be replaced with "Table," as follows:
  - [On and after the date specified in subsection (m) of this section, no] <u>No</u> owner or operator of a municipal waste combustor [for which construction commenced prior to September 20, 1994] <u>unit subject to this section</u> shall cause or allow the emission <u>from such unit</u> of any air pollutant in excess of the applicable emission limit identified in <u>Tables Table</u> 38-1 [and 38-1a] of this subdivision.
- Subdivision (13) of subsection (c) should be deleted as it is redundant to subsection (g)(5) and more limited as it does not specify an averaging time. Further, the requirement is an operating practice rather than an emission standard and so is appropriately included in the eponymous subsection. The deletion of subsection (c)(13) should appear as follows in the final text of Section 44:
  - (13) [During the operation of a MWC unit, the carbon injection system operating parameter(s) that are the primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting) must equal or exceed the level(s) documented during the performance tests specified under subsection (i) of this section, based on a 24-hour daily average.] **Reserved.**
- While the proposed version of Section 38 made changes to eliminate the use of the terms "4-hour block arithmetic average" and "4-hour arithmetic average" as inappropriate substitutes for the defined term "4-hour block average," a few inconsistent uses remain. Those remaining inconsistencies should be corrected through the following changes:
  - o In subsection (a), the terms "maximum demonstrated municipal waste combustor unit load" and "maximum demonstrated particulate matter control device temperature" should be revised not to eliminate the phrase "block arithmetic," as

proposed, but only the word "arithmetic" so that the word "block" is retained and the definitions read as follows:

- [(13)] (14) "Maximum demonstrated municipal waste combustor unit load" means the highest 4-hour [ block arithmetie] average municipal waste combustor unit load achieved during four consecutive hours of operation . . .
- [(14)] (15) "Maximum demonstrated particulate matter control device temperature" means the highest 4-hour [ block arithmetic] average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours of operation . . .
- o In subsection (g)(1), the term "4-hour arithmetic average" should be replaced with "4-hour block average."
- o In subsection (g)(2), the insertion of the phrase "4-hour average" should be eliminated from the term "maximum demonstrated municipal waste combustor unit load," which is a defined term, and the term "4-hour arithmetic average" should be replaced with "4-hour block average," as follows:
  - (2) No owner or operator of a municipal waste combustor unit shall cause or allow such unit to operate at a municipal waste combustor unit load greater than one hundred ten percent (110 %) of the maximum demonstrated 4-hour average municipal waste combustor unit load, based on a 4-hour arithmetic block average, measured
- In Section 38(j)(1)(A), "R.C.S.A." should be replaced with "Regulations of Connecticut State Agencies" for proper format.
- In Section 38(j)(1)(C)(ii), "20 percent" should be replaced with "twenty percent (20%)" to match the format used in other provisions.

#### VI. Conclusion

Based upon the comments submitted by interested parties and addressed in this Hearing Report, I recommend the final amendment, included as Attachment 4 to this report, be submitted by the Commissioner for approval by the Attorney General and the Legislative Regulations Review Committee. Based upon the same considerations, I also recommend that upon promulgation the amendment be submitted to EPA as a revision to the state plan for large and small MWCs.

March 27, 2008
Date

#### **ATTACHMENT 1**

#### Federal Standards Analysis Pursuant to Section 22a-6(h) of the General Statutes

This information is provided in satisfaction of the requirements of C.G.S. section 22a-6(h) in the matter of the proposed 2007 amendment of section 22a-174-38 (Section 38) of the Regulations of Connecticut State Agencies (R.C.S.A.).

As explained below, for the revisions made in this proposal, either (1) the revised text is the same as analogous federal standards or (2) no analogous federal standards exist. The proposed amendment was initiated in response to the U.S. Environmental Protection Agency's (EPA's) May 10, 2006 revisions to the emissions guidelines and new source performance standards (NSPS) for large municipal waste combustors. Revisions that are the same as the May 10, 2006 federal rule include:

- Reductions in the cadmium, lead and particulate matter standards. The existing mercury limitations in Section 38 are not revised since those standards are now at a level below the May 2006 rule revision;
- Revisions to the averaging time for measuring the performance of a carbon injection system to an 8-hour block average and a corresponding addition of a definition of "8-hour block average;"
- The deletion of all provisions applicable to municipal waste combustor units that may be constructed in the future. As the federal NSPS are independently applicable to such units, repetition of such requirements in Section 38 is unnecessary;
- Revisions to the monitoring requirements, including continuous emissions monitoring requirements for sulfur dioxide and carbon dioxide, the specifications for operation of carbon injection systems and the minimum data requirements; and
- The addition of a method to calculate nitrogen oxide and sulfur oxide emissions during the loss of boiler water level or combustion air control.

The proposal does not include recordkeeping requirements in the May 10, 2006 federal rule for periods when a certified operator is not at a facility, as such requirements are not pertinent. Section 38's operator training requirements are determined by R.C.S.A. section 22a-231-1, which requires a certified operator to be at the facility whenever a unit is operating.

Revisions in the proposal that have no federal parallel applicable to the operation of municipal waste combustor units include:

- The elimination of historical compliance dates, requirements and standards, which are constructs of the original state rule adoption and have been rendered unnecessary by passage of time;
- The inclusion of a new record keeping requirement concerning air pollution control
  equipment parameters. Such a requirement is generally included in the MWC operating
  permits. The new language establishes a consistent requirement for all facilities and
  provides language necessary to confirm that all air pollution control equipment is
  operated optimally; and

Section 38. The emissions trading program of Section 38 is a state program for which there is no equivalent in the new source performance standards (NSPS) or emissions guidelines for municipal waste combustors.	
09/05/07	
Date	/s/Merrily A. Gere
Bureau of Air Management	·

The inclusion of an end date for the creation and use of emissions reduction credits under

### ATTACHMENT 2 Proposed Amendment of RCSA Section 22a-174-38

## ATTACHMENT 3 Commenters

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# ATTACHMENT 4 Recommended Final Text of the Amendment of RCSA Section 22a-174-38