EXHIBIT E

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
Greenhouse Gas Emissions and Air Quality Permitting

Hearing Officer:
Merrily A. Gere

Date of Hearing: October 18, 2010

On September 14, 2010, the Commissioner of the Department of Environmental Protection (DEP) published a notice of intent to amend various sections of the Regulations of Connecticut State Agencies (RCSA), including portions of sections 22a-174-1, 22a-174-3a and 22a-174-33. Pursuant to such notice, a public hearing was held on October 18, 2010, with the public comment period closing on the same day.

I. Hearing Report Content

As required by RCSA section 4-168(d) of the Connecticut General Statutes (CGS), this report describes the proposal, identifies 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 text is also provided.

A statement in satisfaction of CGS section 22a-6(h) is included as Attachment 1.

II. Summary of Proposal

The proposal revises certain air pollution regulations to authorize DEP to regulate greenhouse gas (GHG) emissions in its new source review prevention of significant deterioration (NSR PSD) and Title V permitting programs, consistent with the U.S. Environmental Protection Agency's (EPA's) *Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule* [75 FR 31514; June 3, 2010] (the Tailoring Rule), as follows:

- RCSA section 22a-174-1 sets out definitions of general applicability to the air quality regulations. This proposal adds definitions of "carbon dioxide equivalent emissions" and "greenhouse gases."
- In RCSA section 22a-174-33(a)(7), "greenhouse gases" is added to the definition of "regulated air pollutant" under the Title V permitting program.
- RCSA section 22a-174-33(a)(10) is revised to add greenhouse gas emissions thresholds to the definition of "Title V source."
- Subdivisions (1) and (2) of RCSA section 22a-174-33(d) are revised to allow sources to avoid Title V permitting by limiting greenhouse gas emissions.
- RCSA section 22a-174-3a(a)(1) is revised to require sources of greenhouse gas emissions to obtain a permit to construct and operate.
- RCSA section 22a-174-3a(d)(3) is revised to require sources to install Best Available Control Technology (BACT) for greenhouse gas emissions.
- RCSA section 22a-174-3a(j)(1) is revised to add greenhouse gas emissions thresholds to BACT applicability.
- Subdivisions (1) and (2) of RCSA section 22a-174-3a are revised to add greenhouse gas emissions thresholds to PSD applicability.

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

III. Opposition to Proposal

No comments opposed DEP's intent to seek final adoption of this proposal. Some comments suggested revisions to the proposal to provide consistency with the Tailoring Rule or with other provisions within DEP's air pollution control regulations. Other comments suggested formatting revisions to clarify regulatory language within the proposal.

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

IV. Summary of Comments

Written comments were received from the following persons:

1. Ida E. McDonnell, Manager
Air Permits, Toxics, and Indoor Air Programs Unit
United States Environmental Protection Agency
Region 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

2. Eric J. Brown, Associate Counsel
Connecticut Business and Industry Association
350 Church Street
Hartford, CT 06103-1126

3. Pamela F. Faggert, Vice President and Chief Environmental Officer
Dominion Resources Services, Inc.
5000 Dominion Boulevard
Glen Allen, VA 23060

All comments submitted are summarized below with DEP's responses. Commenters are associated with the individual comments below by the number assigned above. 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. Comments not specific to a single portion of the proposal are set out first, followed by comments specific to certain provisions in the proposal, organized by regulatory section.

General comment

1. Comment: We are pleased that these proposed Connecticut amendments are consistent with the Tailoring Rule requirements and, beyond the requirement to obtain a permit, the proposed amendments do not include any emissions standards or control requirements for greenhouse gases. [3]

Response: DEP notes the commenter's support of the consistency of this proposal with the Tailoring Rule.

2. Comment: The Tailoring Rule requires that Connecticut adopt the necessary requirements as of January 2, 2011, or EPA may impose the requirements directly on Connecticut sources through a Federal Implementation Plan (FIP). In a separate rulemaking, EPA has already proposed such a FIP. If implemented, we are concerned that such a FIP would result in dual permitting by EPA and DEP, which could significantly slow the issuance of permits and modifications and increase costs to Connecticut businesses. Therefore, we support the quick promulgation of Connecticut's proposed regulatory revisions to include GHGs in the Title V and NSR PSD permitting programs and to amend the State Implementation Plan (SIP) for air quality to reflect these provisions. [3]

Response: DEP notes the commenter's support for the rapid promulgation of Connecticut's proposed regulatory revisions to include GHGs in DEP's Title V and NSR PSD permitting programs and subsequent submission of a SIP revision. The inclusion of GHG in Connecticut's permitting programs involves two processes, and the outcome of each of the two processes is out of DEP's control. First, the adoption of the proposed amendments to DEP's permitting regulations depends on the support of Connecticut's regulated community and quick reviews by other state agencies and offices involved in the regulatory adoption procedure to achieve rapid adoption of the requirements. Second, once adopted, the amended regulations must be submitted to EPA in the form of a SIP revision, which EPA must review for consistency with the Tailoring Rule and approve. We are working closely with EPA Region 1 to allow for EPA's rapid review and approval. Despite DEP's efforts, there will be a period of time in which NSR PSD permits may not be issued in Connecticut. If both the state and federal processes go smoothly, the period of time in which PSD permits may not be issued will be limited. Any delay in the state adoption

or federal approval process will lengthen the period of time in which PSD permits may not be issued or in which DEP and EPA share permitting authority.

3. Comment: GHG permitting is an entirely new regulatory endeavor, both legally and technically. EPA has been working to develop guidance on what would constitute BACT for GHGs. This guidance is expected to focus on energy efficiency as BACT. To date, EPA has not yet released any such guidance, despite the imminent onset of GHG permitting requirements on January 2, 2011.

The resulting uncertainty presents a risk of an unpredictable patchwork of makeshift BACT determinations, state-by-state, and project-by-project. Since many of the affected projects would involve electricity generating units, such a scenario threatens to further increase the cost of electricity in Connecticut. Last year, Connecticut's electricity prices were already the second highest in the nation, and energy costs are a significant part of the extremely high cost of doing business in Connecticut.

Given the novelty of GHG permitting, the lack of BACT guidance, and the critical need to avoid further adverse impact on Connecticut's electricity costs, CBIA urges DEP to confirm the importance of an appropriately cautious and nationally consistent approach to BACT for GHG emissions. [2]

Response: DEP acknowledges the novelty of GHG permitting and is pleased to have in hand EPA's "PSD and Title V Permitting Guidance for Greenhouse Gases" and accompanying source-specific white papers, which EPA released on November 10, 2010. EPA's guidance will result in a level of consistency in early BACT determinations.

The commenter may be eased in his concern about the imminence of BACT requirements for GHGs in the knowledge that Connecticut will not be an early implementing state for GHG BACT. Connecticut requested a SIP submittal deadline of March 1, 2011. Should DEP fail to submit a SIP by March 1, 2011, EPA will then impose the FIP for GHGs, and EPA will assume authority to issue PSD permits for GHG in Connecticut. Prior to March 1, neither DEP nor EPA will be authorized to issue PSD permits for GHGs. Assuming DEP submits a SIP by March 1, neither DEP nor EPA will have PSD GHG permitting authority until EPA approves the submitted SIP. So, during this interval in early 2011, no PSD permits for GHGs will be issued in Connecticut. Other states, under authority of either the state or EPA, may, in that interval, issue PSD permits that involve a BACT review for GHG, which will be informative to DEP and the regulated community in Connecticut.

It is important to recount that a limited period of time in which no PSD permits will be issued represents a best case scenario, in which both the Connecticut regulatory amendment process and the federal SIP review and approval process occur without incident. Should the regulatory amendment process be delayed for lack of approvals by other state agencies or the Legislative Regulations Review Committee or should EPA's approval of the amended regulations be slow in coming, the period of time in which PSD permits are not issued or in which DEP and EPA share permitting authority could extend well into 2011. While such a scenario may provide the

commenter some relief from his concern about the novelty of GHG BACT determinations, no or slow PSD permitting would not generally benefit Connecticut's business community, particularly for new construction, which may not proceed unless a PSD permit is issued. More information about the possible scenarios is provided in response to comment 5B.

DEP does not have any data to substantiate the commenter's assertion that GHG permitting will cause a direct increase in Connecticut's electricity pricing. Many factors influence electricity pricing including fuel costs, time of year, weather, regional generating unit status and demand. Air quality permitting costs for electric generating units are a minor percentage of overall environmental compliance costs and unlikely to influence electricity costs independent of other factors. This is particularly true for GHG permitting, which in Connecticut will result in new fees only for new major stationary sources that are major for GHGs and not for traditional pollutants, for new major stationary sources that are major for a non-GHG pollutant and emit GHGs at a level of at least 75,000 tons per year carbon dioxide equivalent emissions (CO2e), or for major modifications at existing PSD sources that cause a net emissions increase of 75,000 tons per year CO2e. The NSR PSD permitting costs for such sources are, at most, a $6250 application fee and/or $1750 if a BACT review is required for GHG. If the source is major for a non-GHG pollutant, the application fee would be required regardless of the new GHG provisions. Other fees, such as public notice fees or BACT review fees for non-GHG pollutants, would also apply regardless of the new GHG provisions. Overall, the administrative permitting fees for GHG emissions are minimal compared to total environmental compliance costs.

We understand that sources are concerned about the costs of BACT for GHG. EPA's GHG BACT guidance emphasizes energy efficiency measures, and many such measures will likely create a cost savings due to reduced energy consumption. And, step four of the BACT analysis, which allows for the consideration of the cost effectiveness of controls and energy and other environmental impacts, will apply to GHG emissions.

RCSA section 22a-174-3a(a)

4. Comment: RCSA section 22a-174-3a(a)(1)(H): For consistency with other provisions in RCSA section 22a-174-3a(a)(1), DEP should revise RCSA section 22a-174-3a(a)(1)(H) by placing the word "new" in front of stationary source:

> "New stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO2e and one hundred (100) tons per year of greenhouse gases;" [1]

Response: DEP should revise the proposed regulatory amendment in response to this comment. The addition of the word "new" to RCSA section 22a-174-3a(a)(1)(H) would provide consistency with other provisions in RCSA section 22a-174-3a(a)(1) and would clarify DEP's intent, consistent with the Tailoring Rule, to regulate only *new* stationary sources under RCSA section 22a-174-3a(a)(1)(H). RCSA section 22a-174-3a(a)(1)(H) should be revised as follows:

(H) **New stationary** ~~Stationary~~ source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO2e and one hundred (100) tons per year of greenhouse gases;

5. Comment: For each of the following comments, requested language changes are provided below.

A. The proposed revisions to RCSA section 22a-174-3a(a)(1) indicate an effort to incorporate the substance of the Tailoring Rule through means other than that Rule's labyrinthine approach. CBIA appreciates DEP's efforts in this regard.

For increased clarity, the format for the proposed greenhouse gas (GHG) triggers in RCSA section 22a-174-3a(a)(1) could be further broken out, as set out below. This revised format would also more directly track the core substantive components of the Tailoring Rule, which would help regulated parties already familiar with the EPA format to navigate the reformatted Connecticut version. The revised format would also help to prevent loss of the clarity provided by RCSA section 22a-174-3a(a)(1) relative to former RCSA section 22a-174-3(a)(1), which by the time it was repealed had grown to a long and unwieldy list of over a dozen source types.

B. The GHG-related triggers proposed for RCSA section 22a-174-3a(a)(1) do not incorporate the phased deadlines adopted by EPA in the Tailoring Rule for the first six months of 2011. If the proposed regulations are adopted before July 1, 2011, the lack of such phasing would cause the regulations to be stricter than the federal standards. No such intent is stated in the "Federal Standards Analysis" prepared by DEP as required by CGS section 22a-6(h) and made part of the rulemaking record. Presumably DEP did not intend to disregard the phased deadlines adopted by EPA; accordingly, they should be incorporated into the proposed RCSA section 22a-174-3a(a)(1) revisions.

C. As drafted, proposed RCSA section 22a-174-3a(a)(1)(H) would seem to require section 3a permitting for "any …(H) Stationary source that emits, or has the potential to emit, … [≥100,000 TPY, and 100 TPY of GHG on a mass basis] ," id. (emphasis supplied). This would seem to apply to any existing stationary source meeting those numeric criteria, and in the absence of a modification with a significant net emissions increase of GHG. Presumably DEP's intent was rather to expand section 3a permitting only to new sources and existing sources undergoing modification, subject to GHG potential-to-emit thresholds. Again, no contrary intent is stated in the CGS section 22a-6(h) "Federal Standards Analysis" prepared by DEP.

D. As in RCSA section 22a-174-33, the proposed GHG applicability triggers in RCSA section 22a-174-3a(a)(1) should link the CO2e-based triggers with mass-based triggers, to avoid snaring small sources with low GHG emissions by mass.

This would also make proposed RCSA section 22a-174-3a(a)(1) consistent with proposed RCSA section 22a-174-3a(j)(1).

Following is proposed language for RCSA section 22a-174-3a(a)(1), to implement the foregoing comments (proposed changes in double-underlined font)

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Sec. 5. Section 22a-174-3a(a)(1) of the Regulations of Connecticut State Agencies is amended as follows:

(1) Applicability. Prior to beginning actual construction of any stationary source or modification not otherwise exempted in accordance with subdivision (2)(A) to (C) of this subsection, the owner or operator shall apply for and obtain a permit to construct and operate under this section for any:

(A) New major stationary source;

(B) Major modification;

(C) New or reconstructed major source of hazardous air pollutants subject to the provisions of subsection (m) of this section;

(D) New emission unit with potential emissions of fifteen (15) tons or more per year of any individual air pollutant;

(E) Modification to an existing emission unit which increases potential emissions of any individual air pollutant from such unit by fifteen (15) tons or more per year;

(F) Stationary source or modification that becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant; [or]

(G) Incinerator for which construction commenced on or after June 1, 2009, except if such incinerator is used:

(i) for the primary purpose of reducing, controlling or eliminating air pollution, or

(ii) as a solid waste incineration unit subject to an emission guideline issued pursuant to Section 129 of the Act; [.]

(H) With respect to greenhouse gas emissions:

(i) New major stationary source that

i. is a major stationary source for one or more air pollutants other than a greenhouse gas, and

ii. emits or has the potential to emit 75,000 tons or more per year of CO2e and 100 tons per year of greenhouse gases;

(ii) New stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO2e and one hundred (100) tons per year of greenhouse gases;

(iii) Existing major stationary source that

i. is a major stationary source for one or more air pollutants other than a greenhouse gas, and

ii. undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO2e and 100 tons per year of greenhouse gases; or

(iv) Existing stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO2e and one hundred (100) tons per year of greenhouse gases, when such stationary source undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO2e and 100 tons per year of greenhouse gases.

Subsections 3a(a)(1)(H)(ii) and (iv) shall take effect July 1, 2011 or upon adoption, if later. [2]

Response: Each of numbered responses below corresponds with the numbered points in comment 5 above.

A. DEP should not revise the proposal in response to this comment. DEP appreciates the commenter's suggestion that DEP revise the proposal to track the substantive components of the Tailoring Rule. However, the proposal clearly identifies the sources that DEP intends to regulate under RCSA section 22a-174-3a, and the commenter's suggested format, while different, is not clearly better. DEP is confident that the regulated community will be able to understand the ten subparagraphs in RCSA section 22a-174-3a(a)(1).

B. DEP should not revise the proposal in response to this comment. The commenter is correct that DEP does not phase-in GHG permitting requirements under the

proposal as EPA does in the Tailoring Rule. All of the sources that will become subject to regulation as of July 1, 2011 according to the step 2 of the Tailoring Rule will become subject to regulation under DEP's permitting programs as of the effective date of this proposal. To avoid a long permitting disruption, DEP is working to achieve a rapid adoption of this proposal and expects formal adoption of the proposal in early 2011, perhaps several months before step 2 will begin under the Tailoring Rule. DEP recognizes that it is not required to subject certain sources of GHGs to its permitting programs before July 1, 2011.

DEP anticipates the practical result of adopting only the step 2 requirements of the Tailoring Rule to be the same as if DEP had adopted both steps. The likelihood that DEP will issue a PSD permit to a source prior to July 1 that would otherwise not have been a PSD source, but for the omission of step 1 of the Tailoring Rule, is remote.

To understand the practical result of adopting only the Tailoring Rule's step 2 requirements, it is important to keep the following information in mind:

- DEP requested an early SIP submittal deadline of March 1, 2011. EPA cannot impose the Tailoring Rule FIP until after March 1, 2011 and only if DEP fails to submit a SIP revision by March 1, 2011. During the period from January 2, 2011 until EPA imposes the FIP or approves a SIP revision submitted by DEP, neither EPA nor DEP will have authority to issue PSD permits for GHG emissions in Connecticut.

- DEP is not aware of any planned new stationary source or modification that would become a PSD source based solely on the source's potential GHG emissions under step 2 of the Tailoring Rule. Such a "major for GHG" source is the only sort of source that would be subject to a different permitting result because of DEP's adoption of only the step 2 requirements. That such a source will become known to DEP after January 1, 2011 and have any possibility of applying for and obtaining a NSR PSD permit prior to July 1, 2011 is highly unlikely given average NSR PSD permit processing times for major sources.[1]

The following bullets layer the regulatory adoption process and EPA approval timing possibilities on top of Connecticut's SIP submittal deadline to present three specific, alternative scenarios for how GHG emissions may be permitted in Connecticut in 2011:

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[1] Current time from receipt of an application to issuance of a NSR permit for a major stationary source is about 365 days. DEP has made a commitment to reduce the length of time to 180 days if certain resources are made available. However, even the 180-day time to issuance is not possible for a new source or major modification that has not yet held a pre-application meeting as of the date of this hearing report.

See DEP's Permitting Assessment Report (September 30, 2010) for more information about the permit process and current and goal processing times. The report is available on the DEP website at the following location: http://www.ct.gov/dep/lib/dep/permits_and_licenses/assessment/permit_assessment_report.pdf

- **DEP does not submit a SIP revision to EPA by March 1, 2011, and EPA immediately imposes its FIP:** Any permits issued between March 2, 2011 and the date on which EPA approves a Connecticut SIP would be issued jointly by EPA for GHGs and by DEP for all other pollutants. EPA would issue the GHG portion under the Tailoring Rule, including the phased requirements. For any PSD permit issued, the result would be as if DEP had adopted the phased approach.

- **DEP submits its revised SIP to EPA on or before March 1, 2011, and EPA approves the SIP before July 1:** DEP would process and issue any PSD applications for GHG under Connecticut requirements consistent with step 2 of the Tailoring Rule from the date of SIP approval. As DEP processes fewer than five NSR PSD applications per year, the issuance of a PSD permit for GHG during that time period is highly unlikely. The unlikelihood of such a permit issuance is supported by DEP's lack of knowledge of any plans for such a new source or modification, particularly a new source or modification that would be regulated under step 2 of the Tailoring Rule but not under step 1. DEP now has applications that have been submitted by two "anyway" PSD sources[2] that will need to address GHG emissions after January 1, 2011. The projects that are the subject of those two applications are halted for reasons unrelated to GHG emissions. If either of those permit applications are processed after January 1, 2011, DEP's decision to adopt only the step 2 requirements will not change the status of those applications since they are PSD sources on the basis of their non-GHG emissions and so would be subject to PSD and be required to address GHG emissions under both step 1 and step 2 of the Tailoring Rule.

  If either of those two sources completed all of the necessary application and process steps so that the permit was ready to be issued between January 2 and March 1, the applicant will experience a delay. However, that delay is unrelated to DEP's decision to skip step 1 requirements and is instead related to the regulatory adoption process times in Connecticut.

- **DEP submits its revised SIP to EPA on or before March 1, 2011, and EPA does not approve the SIP until on or after July 1, 2011:** No PSD permits for GHG would be issued until after July 1, 2011 and they would be issued under DEP's authority and regulations. Given the administrative obliteration of the step 1 time period, DEP's lack of step 1 requirements is of no consequence.

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[2] In step 1 of the Tailoring Rule, GHG sources are subject to the PSD program for GHG emissions if they are PSD sources "anyway" due to non-GHG emissions. Such "anyway" sources will be subject to PSD for GHG if new construction or a modification increases GHG emissions by 75,000 tons CO2e or more. In step 1, no source becomes major for PSD based on GHG emissions.

DEP is not required to revise the CGS section 22a-6(h) statement since this proposal and the federal regulations achieve the same ultimate regulatory result. Furthermore, as a practical matter, there is no impact from the early application of requirements based on step 2 of the Tailoring Rule, as set out in the scenarios above.

Finally, EPA developed the stepwise approach to GHG permitting to assess the cost and burden to permitting authorities and to allow permitting authorities to develop expertise on GHG permitting while reviewing permits for a subset of the potential GHG permitting universe. The phased timing is not intended to assist the regulated community. DEP is confident in its ability to address GHG emissions in the PSD program when DEP has the regulatory authority to so do.

C. DEP should revise the proposal in response to this comment with the addition of the word "new," as explained in the response to comment 4.

D. DEP should not revise the proposal in response to this comment. The commenter misinterprets the sources that must meet the mass-based greenhouse gas threshold under the Tailoring Rule. DEP revised RCSA section 22a-174-33(a)(10) in response to the Tailoring Rule to include sources of greenhouse gas emissions in the definition of "Title V source," at greenhouse gas thresholds of 100 tons per year on a mass basis and 100,000 tons per year CO2e. These thresholds define a "major source" due to greenhouse gas emissions. RCSA sections 22a-174-3a(1)(H) and (J) and sections 22a-174-3a(j)(F), (H) and (I) also include a 100 tons per year mass-based threshold to specify that the regulated source is a major source of greenhouse gases. A 100 tons per year mass-based threshold should not be added to the proposal as set out in the commenter's suggested RCSA sections 22a-174-3a(1)(H)(i), (iii) and (iv). The Tailoring Rule subjects neither new nor existing major stationary sources of pollutants other than greenhouse gases to a 100 tons per year mass-based threshold for GHGs. Since EPA has not yet established a mass-based significance level for greenhouse gases, the mass-based threshold for these sources is zero tons per year.

RCSA section 22a-174-3a(j)

6. Comment: DEP should add the following phrase to RCSA section 22a-174-3a(j)(1)(F) to clarify that BACT for significant-level pollutants is contingent on the source meeting the GHG thresholds. Without this additional phrase, it could be interpreted to apply BACT to any significant-level pollutants at any new stationary source without the necessary requirement that the source is major for GHGs. [1]

"From each new stationary source, potential emissions of 100,000 tons or more per year of CO2e and potential emissions of one hundred (100) tons or more per year of

greenhouse gases and, from such a source, potential emissions of each air pollutant above the significant emission rate threshold in Table 3a(k)-1 of this section."

Response: DEP agrees that without the necessary requirement that the source be major for GHGs, RCSA section 22a-174-3a(j)(1)(F) could be interpreted to apply BACT to pollutants emitted at significant levels from any new stationary source. RCSA section 22a-174-3a(j)(1)(F) should be revised, as follows:

(F) **Potential emissions of 100,000 tons or more per year of CO2e and potential emissions of one hundred (100) tons or more per year of greenhouse gases** ~~From~~ **from** each new stationary source~~,~~ and, **from such a source,** ~~potential emissions of 100,000 tons or more per year of CO2e and potential emissions of one hundred (100) tons or more per year of greenhouse gases and~~ potential emissions of each air pollutant above the significant emission rate threshold in Table 3a(k)-1 of this section;

7. Comment: RCSA sections 22a-174-3a(j)(1)(G), (H) and (I) are written slightly different for modifications due to greenhouse gas emissions than sections 22a-174-3a(j)(1)(B) and (D) which deal with modifications from other pollutants. When a source is modifying, the new RCSA sections 22a-174-3a(j)(1)(G), (H) and (I) appear to include a source's existing potential emissions when determining the threshold for BACT and do not limit the emissions increase calculation to emissions just from the change. This is more stringent than 40 CFR 51.166(b)(iv)(b) and (v)(b) require, and Connecticut is free to adopt more stringent requirements than federal regulations require, but this additional stringency is not required as a matter of federal law. Cf. RCSA section 22a-174-3a(l)(J). If Connecticut desires to revise these sections to match minimal federal requirements, the following changes are suggested:

- Divide section (G) into separate numbered clauses to match (H) and (I).
- In each of (G)-(I), order the three numbered clauses so that the "undertakes" clause is listed *last*.
- In each of (G)-(I), revise the "undertakes" clause to specify that the change causes the referenced increase in potential emissions. [1]

Response: DEP should revise the proposal in response to this comment as DEP did not intend to be more stringent than 40 CFR 51.166(b)(iv)(b) and (v)(b). DEP intends to require BACT in RCSA sections 22a-174-3a(j)(1)(G),(H) and (I) based on a source's potential emissions due to a physical change or a change in the method of operation.

As part of the effort to be consistent with the Tailoring Rule, DEP should revise subparagraph (I) to address the lack of a 75,000 tons per year potential emissions increase of CO2e linked to the modification, which is a prerequisite to addressing BACT for the non-GHG emissions that may increase as a result of the modification. Subparagraph (I) is addressing the requirements of 40 CFR 52.21(b)(49)(v)(b). The type of source that would be regulated is a source that is a minor source for traditional pollutants but is major for GHG. After the modification, the first step to addressing emissions increases is to consider increases in the CO2e emissions, and, if CO2e

emissions are 75,000 tons or more per year, apply BACT to GHG. If the modification also causes an increase in a non-GHG pollutant above the significant emission rate thresholds of Table 3a(k)-1, such a non-GHG emissions increase would also be subject to BACT.

Because Connecticut requires a minor source that makes a modification that results in an increase of any regulated pollutant of 15 tons per year or more to address BACT for that pollutant, this clarification to our regulations has a practical impact in only a few cases. In other states that lack Connecticut's minor source BACT requirements, if a modification resulted in an increase in emissions of a non-GHG pollutant above the significant emission rate threshold but did not cause an increase in GHG emissions of at least 75,000 tons per year, the source owner would not be required to address BACT for the non-GHG pollutant.

Also, the hearing officer is correcting a misprint by replacing "; or" with "." at the end of the last subclause of RCSA section 22a-174-3a(j)(1)(I).

Accordingly, subparagraphs (G), (H) and (I) of RCSA section 22a-174-3a(j)(1) should be revised as follows:

(G) Potential emissions of 75,000 tons or more per year of CO2e from each ~~major stationary source that undertakes a~~ physical change or ~~a~~ change in the method of operation **of a major stationary source**;

(H) Potential emissions of 75,000 tons or more per year of CO2e from each **physical change or change in the method of operation of a** stationary source**,** ~~that~~ **where such stationary source**:

~~(i) Undertakes a physical change or a change in the method of operation,~~

~~(ii)~~**(i)** Emits or has the potential to emit equal to or greater than 100,000 tons per year CO2e, and

~~(iii)~~**(ii)** Emits or has the potential to emit equal to or greater than one hundred (100) tons or more per year of greenhouse gases; or

(I) Potential emissions **of 75,000 tons or more per year of CO2e and potential emissions** of each air pollutant above the significant emission rate thresholds in Table 3a(k)-1 of this section from each **physical change or change in the method of operation of a** stationary source**,** ~~that~~ **where such stationary source**:

~~(i) Undertakes a physical change or a change in the method of operation,~~

~~(ii)~~**(i)** Emits or has the potential to emit equal to or greater than 100,000 tons per year CO2e, and

~~(iii)~~**(ii)** Emits or has the potential to emit equal to or greater than one hundred (100) tons or more per year of greenhouse gases~~**; or**~~ **.**

8. Comment: Given the complexity of the existing PSD program, it would be best to provide for as much clarity as possible, and limit the added complexity from the pending proposed revisions. The text in RCSA section 22a-174-3a(j)(1), already dense and difficult to assess, becomes that much more so by addition of GHG emissions. However, the content of RCSA section 22a-174-3a(j)(1) is essentially variations on a single theme, and can be set out more coherently in a table format, as set out below.

In addition, there seem to several instances where additional language is needed to make the proposed RCSA section 22a-174-3a(j)(1) consistent with the Tailoring Rule, and with the rest of the proposed regulatory revisions:

A. The criterion for proposed RCSA section 22a-174-3a(j)(1)(E) seems incomplete, in omitting the condition that the new major stationary source must be major for an air pollutant other than GHG.

B. For proposed RCSA section 22a-174-3a(j)(1)(G), the provision omits the 100 tons/year GHG threshold to accompany the 75,000 tons/year CO2e threshold.

C. For proposed RCSA section 22a-174-3a(j)(1)H), the provision omits the causal linkage between the change and the 75,000 tons/year emissions increase.

These points are addressed in the table below.

Sec. 7. Section 22a-174-3a(j)(1) of the Regulations of Connecticut State Agencies is amended as follows:

(1) An owner or operator shall incorporate BACT for the potential emissions specified in Table 3a(j)(1), and subject to all applicable conditions in such table:

Table 3a(j)(1)
Emissions subject to BACT

	Source of potential emissions:	**Potential emissions consisting of:**	**Applicability threshold for BACT:**
(A)	New major stationary source	Any air pollutant	The significant emission rate thresholds in Table 3a(k)-1 of subsection (k) of this section
(B)	Major modification to a major stationary source	Any air pollutant	The significant emission rate thresholds in Table 3a(k)-1 of subsection (k) of this

			section. (Note: where applicable, BACT applies to each individual emission unit that is being modified as part of such major modification.)
(C)	Each new emission unit	Any air pollutant	≥15 tons/year
(D)	Modification to each existing emission unit	Any air pollutant	≥15 tons/year
(E)	New major stationary source that is major for an air pollutant other than GHG	CO2e and Greenhouse gases	Both CO2e: ≥75,000 tons/year, and GHG: ≥100 tons/year
(F)	New stationary source (see Note)	CO2e and Greenhouse gases	Both CO2e: ≥100,000 tons/year, and GHG: ≥100 tons/ year
(G)	Major stationary source that undertakes a physical change or a change in the method of operation	CO2e and Greenhouse gases	Emission increase from such change: - CO2e: ≥75,000 tons/year, and - GHG: ≥100 tons/year
(H)	Stationary source that meets the following criteria: (1) Undertakes a physical change or a change in the method of operations, and; (2) has potential or actual emissions of equal to or greater than 100,000 tons of CO2e and 100 tons of greenhouse gases (see Note)	CO2e and Greenhouse gases	Emission increase from such change: - CO2e: ≥75,000 tons/year, and - GHG: ≥100 tons/year
(I)	Stationary source that (1) Undertakes a physical change or a change in the method of operations, and; (2) Potential or actual emissions of equal to or greater than 100,000 tons of CO2e and 100 tons of greenhouse gases	Any air pollutant	Significant emission rate thresholds in Table 3a(k)-1

Note: Effective July 1, 2011 or upon adoption, if later.

~~(A) Potential emissions of each [regulated] air pollutant above the significant emission rate thresholds in Table 3a(k) -1 of subsection (k) of this section, from each new major stationary source;~~

~~(B) Potential emissions of each [regulated] air pollutant above the significant emission rate thresholds in Table 3a(k) -1 of [subsection (k) of] this section, from each major modification. This requirement applies to each individual emission unit that is being modified as part of such major modification;~~

~~(C) Potential emissions of fifteen (15) tons or more per year of any [individual] air pollutant, from each new emission unit; [and]~~

~~(D) Potential emissions of fifteen (15) tons or more per year of any [individual] air pollutant, from a modification to each existing emission unit;[.]~~

~~(E) Potential emissions of 75,000 tons or more per year of CO2e from each new major stationary source;~~

~~(F) From each new stationary source, potential emissions of 100,000 tons or more per year of CO2e and potential emissions of one hundred (100) tons or more per year of greenhouse gases and potential emissions of each air pollutant above the significant emission rate threshold in Table 3a(k) 1 of this section;~~

~~(G) Potential emissions of 75,000 tons or more per year of CO2e from each major stationary source that undertakes a physical change or a change in the method of operation;~~

~~(H) Potential emissions of 75,000 tons or more per year of CO2e from each stationary source that:~~

~~(i) Undertakes a physical change or a change in the method of operation,~~

~~(ii) Emits or has the potential to emit equal to or greater than 100,000 tons per year CO2e, and~~

~~(iii) Emits or has the potential to emit equal to or greater than one hundred (100) tons or more per year of greenhouse gases; or~~

~~(I) Potential emissions of each air pollutant above the significant emission rate thresholds in Table 3a(k) 1 of this section from each stationary source that:~~

~~(i) Undertakes a physical change or a change in the method of operation,~~

~~(ii) Emits or has the potential to emit equal to or greater than 100,000 tons per year CO2e, and~~

~~(iii) Emits or has the potential to emit equal to or greater than one hundred (100) tons or more per year of greenhouse gases; or~~ [2]

Response: DEP appreciates the commenter's efforts to make the rule clearer, and presumably, improve compliance and the accuracy of permit applications. However, DEP declines to put the BACT thresholds within RCSA section 22a-174-3a(j)(1) into tabular form. DEP believes that the existing regulatory text is clear and precise. If the commenter finds it helpful to organize regulatory requirements in tabular form as a heuristic device, he is welcome to so do.

DEP does appreciate the commenter's comparison of our requirements with the Tailoring Rule, and we respond to the points raised in order:

A. DEP should not revise the proposal in response to this comment as the "omission" the commenter identifies is intentional. The commenter distinguishes between "major stationary source" and "major stationary source for one or more air pollutants other than a greenhouse gas." This is not necessary since DEP did not revise its definition of "major stationary source" in RCSA section 22a-174-1 of the proposal to include greenhouse gas emissions.

B. DEP should not revise the proposal in response to this comment as a 100 tons per year mass-based threshold is not an appropriate addition to RCSA section 22a-174-3a(j)(1)(G). The Tailoring Rule does not subject sources undergoing a physical change or a change in the method of operation to a mass-based threshold of 100 tons per year of greenhouse gases. EPA has not established a mass-based significance level for greenhouse gases, so the mass-based screening level is zero tons per year.

C. DEP agrees that proposed RCSA sections 22a-174-3a(j)(1)(G), (H) and (I) could be interpreted to determine BACT based on a source's existing potential emissions instead of a source's potential emissions due to a physical change or a change in the method of operation. DEP intended the latter and so should revise RCSA sections 22a-174-3a(j)(1)(G), (H) and (I) as set out in the response to comment 7.

RCSA section 22a-174-3a(k)

9. Comment: RCSA section 22a-174-3a(k)(1)(A) should be revised to address the scenario of 40 CFR 51.166(b)(iv)(a). PSD requirements for GHG emissions apply at a new major stationary source of a non-GHG pollutant where the GHG emissions are 75,000 tons per year CO2e. While the BACT provisions at RCSA section 22a-174-3a(j)(1)(E) apply BACT in this situation, revisions to RCSA section 22a-174-3a(k) applicability provisions may be necessary to ensure coverage of other provisions in RCSA section 22a-174-3a(k). [1]

Response: DEP should revise the proposal by the addition of new subparagraph (C) to make it clear that a source that is major for a non-GHG pollutant is also subject to PSD for GHG, if GHG emissions are at least 75,000 tons per year CO2e. RCSA section 22a-174-3a(k)(1) should be revised as follows:

(1) The provisions of this subsection shall apply to the owner or operator of any new: [major stationary source for each criteria air pollutant that is significant from such new major stationary source located in an attainment area or unclassified area for such pollutant.]

(A) Major stationary source for each air pollutant emitted at a level equal to or greater than the threshold designated in Table 3a(k)-1 from such new major stationary source located in an attainment area or unclassified area for such pollutant; ~~or~~

(B) Stationary source ~~that~~ **for greenhouse gases, if the source** emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO2e and one hundred (100) tons per year of greenhouse gases.; **or**

(C) Major stationary source:

(i) For each air pollutant emitted at a level equal to or greater than the threshold designated in Table 3a(k)-1 from such new major stationary source located in an attainment area or unclassified area for such pollutant, and

(ii) For greenhouse gases, if the source emits, or has the potential to emit, equal to or greater than 75,000 tons per year of CO2e.

10. Comment: RCSA section 22a-174-3a(k)(4) should be modified to not only apply to a "new major stationary source or modification," but also to apply to the additional scenarios addressed by RCSA section 22a-174-3a(j)(1)(E)-(I), so as to require BACT for GHG and, when appropriate, BACT for non-GHG pollutants when triggered by GHG emissions. [1]

Response: Subdivision (4) of RCSA section 22a-174-3a(k) was not included in DEP's original proposal. The subject of subsection (k)(4), BACT for major stationary sources, was clearly set out in reference to GHG emissions as an intended result of this proposal. Given that sufficient notice was provided for EPA's recommended change, DEP should include revisions to subsection (k)(4) in its proposal, modified to encompass all the scenarios proposed for inclusion in RCSA section 22a-174-3a(j)(1). RCSA section 22a-174-3a(k)(4) should be revised as follows:

(4) The owner or operator of a ~~new~~ major stationary source**,** ~~or~~ major modification **or stationary source** subject to this subsection shall install BACT as approved by the commissioner in accordance with subsection (j) of this section.

11. Comment: RCSA section 22a-174-3a(k)(5) should be modified to require ambient monitoring for GHG emissions that exceed 75,000 tons per year CO2e, in accordance with 40 CFR 51.166(m)(i)(a)-(b). [1]

Response: DEP appreciates EPA's attention to requiring the full array of PSD requirements for GHG emissions, including the ambient monitoring requirements of 40 CFR 51.166(m). However, rather than include ambient monitoring for GHGs, DEP is requesting that EPA allow Connecticut a universal exemption from RCSA section 22a-174-3a(k)(5) for GHGs emitted by major stationary sources and major modifications, under the authority of 40 CFR 51.166(i)(5)(iii), which allows for such an exemption for a pollutant that is not listed in 40 CFR 51.166(i)(5)(i).

In anticipation that this request for exemption will be granted, DEP should make no revision to the proposal.

12. Comment: As with RCSA section 22a-174-3a(j)(1), RCSA section 22a-174-3a(k)(1) essentially consists of variations on a theme, and can be set out more coherently in a table format:

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Sec. 8. Subdivisions (1) and (2) of section 22a-174-3a(k) of the Regulations of Connecticut State Agencies are amended as follows:

(1) New sources. The provisions of this subsection shall apply to the owner or operator of any of the following sources, under the conditions as set out for that source in Table 3a(k)-New:

Table 3a(k)-New

	Source of emissions:	**Emissions consisting of:**	**Basis of calculating emissions**	**Applicability threshold for BACT:**	**Additional conditions**
(A)	New major stationary source	Any air pollutant	Actual emissions	The significant emission rate thresholds in Table 3a(k)-1 of subsection (k) of this section	i. Source must be located in an attainment area or unclassified area for the pollutant
(B)	New stationary source	CO2e, greenhouse gases	Actual or potential emissions	CO2e: >100,000 tons/year Greenhouse gases: >100 tons/year	---

(2) Modifications. The provisions of this subsection shall apply to the owner or operator of any of the following, under the conditions as set out for that source in Table 3a(k)-Modification:

Table 3a(k)-Modification

	Source of emissions:	**Emissions consisting of:**	**Basis of calculating emissions**	**Applicability threshold for BACT:**	**Additional conditions**
(A)	Major stationary source that undertakes a major modification	Any air pollutant	i. Actual emissions; and ii. Net emissions increase	For each of actual emissions and net emissions increase: the significant emission rate thresholds in Table 3a(k)-1 of subsection (k) of this section	i. Source must be located in an attainment area or unclassified area for the pollutant
(B)	Major stationary source that undertakes a physical change or change in the method of operation	CO2e	Net emissions increase	≥75,000 tons/year	---
(C)	Stationary source that emits or has the potential to emit >100,000 tons/year of CO2e and >100 tons/year of greenhouse gases, and that undertakes a physical change or change in the method of operation	CO2e	Net emissions increase	≥75,000 tons/year	---

~~new: [major stationary source for each criteria air pollutant that is significant from such new major stationary source located in an attainment area or unclassified area for such pollutant.]~~

~~(A) Major stationary source for each air pollutant emitted at a level equal to or greater than the threshold designated in Table 3a(k)-1 from such new major stationary source located in an attainment area or unclassified area for such pollutant; or~~

~~(B) Stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO2e and one hundred (100) tons per year of greenhouse gases.~~

~~(2) The provisions of this subsection shall apply to the owner or operator of any [major modification for each criteria air pollutant from such major modification located in an attainment area or unclassified area for such pollutant, that has]:~~

(A) [Actual emissions that are equal to or greater than the significant emission rate thresholds in Table 3a(k)-1 of this subsection; and] Major modification for each air pollutant from such major modification located in an attainment area or unclassified area for such pollutant, that has:

(i) Actual emissions that are equal to or greater than the significant emission rate thresholds in Table 3a(k)-1 of this subsection, and

(ii) A net emissions increase that is equal to or greater than the significant emission rate thresholds in Table 3a(k)-1 of this subsection;

(B) [A net emissions increase that is equal to or greater than the significant emission rate thresholds in Table 3a(k)-1 of this subsection.] Major stationary source when such major stationary source undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO2e; or

(C) Stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO2e and one hundred (100) tons per year of greenhouse gases, when such stationary source undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO2e. [2]

Response: DEP should not revise the proposed language in response to this comment. As drafted in the proposal, RCSA section 22a-174-3a(k) is broken into subparagraph (1) for new sources and subparagraph (2) for modifications. The regulatory language is clear and, revised as recommended in response to comment, is consistent with the Tailoring Rule. While different than the proposed text, the tables offered by the commenter provide no recognizable advantage.

V. Conclusion

Based upon the comments addressed in this Hearing Report, I recommend the proposal be revised as recommended herein and that the recommended final proposal, included as Attachment 3 to this report, shall be submitted by the Commissioner for approval by the Attorney General and the Legislative Regulations Review Committee and upon adoption, be submitted to the U.S. Environmental Protection Agency as a revision to the State Implementation Plan.

Merrily A. Gere — *December 3, 2010*
/s/Merrily A. Gere — Date
Hearing Officer

ATTACHMENT 1

Federal Standards Analysis Pursuant to Section 22a-6(h) of the General Statutes Amendment Concerning Greenhouse Gas Emissions and Air Quality Permitting

Pursuant to section 22a-6(h) of the Connecticut General Statutes (CGS), the Commissioner of the Department of Environmental Protection (the Department) is authorized to adopt regulations pertaining to activities for which the federal government has adopted standards or procedures. At the time of public notice, the Commissioner must distinguish clearly all provisions of a regulatory proposal that differ from federal standards or procedures either within the regulatory language or through supplemental documentation accompanying the proposal. In addition, the Commissioner must provide an explanation for all such provisions in the regulation-making record required under CGS Title 4, Chapter 54 and make such explanation publicly available at the time of the notice of public hearing required under CGS section 4-168.

In accordance with the requirements of CGS section 22a-6(h) the following statement is entered into the public administrative record regarding the proposed revision of sections 22a-174-1, 22a-174-33(a)(7), 22a-174-33(a)(10), 22a-174-33(d)(1) and (2), 22a-174-3a(a)(1), 22a-174-3a(d)(3), and 22a-174-3a(j)(1) of the Regulations of Connecticut State Agencies (RCSA):

The proposed revisions are to Connecticut's New Source Review Prevention of Significant Deterioration (NSR PSD) and Title V air quality permitting programs. Both of these air permitting programs are currently approved by the U.S. Environmental Protection Agency (EPA) as meeting minimum federal requirements. EPA recently revised the requirements for these two programs to define when air quality permits under NSR PSD and Title V are required for greenhouse gas emissions from new and existing stationary sources. See *Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule* [75 FR 31514; June 3, 2010] [the Tailoring Rule]. The proposed revisions to the air permitting programs incorporate the requirements of the Tailoring Rule, as set out in 40 CFR 51, 52, 70 and 71. Overall, the proposed revisions trigger air quality permitting requirements for the same sources that would be regulated if the federal requirements applied in Connecticut. The proposed revisions differ in certain respects from the approach used in the Tailoring Rule to achieve the same outcome in permitting. The specific similarities and differences are as follows:

The Department revised RCSA section 22a-174-1 to include new definitions for "carbon dioxide equivalent emissions" and "greenhouse gases." These two definitions are nearly identical to the definitions for these terms that EPA included in the Tailoring Rule.

The Department did not adopt the Tailoring Rule's approach to including greenhouse gases in its air quality permitting programs. The Tailoring Rule's definition of "subject to regulation" authorizes EPA to regulate greenhouse gases under the federal PSD NSR and Title V permit programs. Rather than adopt the term "subject to regulation," for the Title V program, the

Department added greenhouse gases to the list of air pollutants in the definition of "regulated air pollutant" under section 22a-174-33(a)(7). "Regulated air pollutant" is the term that defines those pollutants subject to Title V permitting and reporting.

To include greenhouse gases in the NSR PSD program, the Department added applicability thresholds for greenhouse gases to sections 22a-174-3a(a)(1), 22a-174-3a(d)(3), and 22a-174-3a(j)(1). The revision to section 22a-174-3a(j)(1) includes the equivalent of a significant emission rate threshold to define the amount of greenhouse gas emissions that trigger Best Available Control Technology requirements.

The proposed revisions incorporate the same applicability thresholds for greenhouse gas emissions that define sources subject to the NSR PSD and Title V permit programs that EPA set out in the Tailoring Rule in 40 CFR 51, 52, 70 and 71. Thus, the proposed revisions are substantially identical to the federal requirements in the regulatory provisions and identical in result.

September 1, 2010
Date

Merrily A. Gere
Merrily A. Gere
Bureau of Air Management

ATTACHMENT 2

Proposed Regulatory Amendment

ATTACHMENT 3

Final Text of Amendment,
Based on Recommendations in the Hearing Officer's Report