RESPONSIVENESS SUMMARY

PROPOSED AMENDMENTS TO AIR POLLUTION CONTROL REGULATIONS AND REVISIONS TO VERMONT'S STATE IMPLEMENTATION PLAN (SIP)

January 3, 2011

List of Commenters:

1. Ida E. McDonnell, Manager, Air Permits, Toxics, and Indoor Air Programs Unit, U.S. Environmental Protection Agency, Region 1

2. Denis Rydjeski, Programs Chair, and Betsy Eldredge, Secretary, Sierra Club of the Upper Valley

3. Janet M. Doyle, Energy and Environmental Programs, IBM

Summary of Comments and Responses:

[The commenter is identified by the number in the bracket following the comment.]

1. Comment: Vermont should adopt the U.S. Environmental Protection Agency's (EPA's) definition of "greenhouse gases" set forth in EPA's Prevention of Significant Deterioration

(PSD) and Title V Greenhouse Gas Tailoring Rule (hereinafter "Tailoring Rule"). One commenter is concerned that Vermont's proposed definition of "greenhouse gas" differs from the federal definition by allowing the Secretary to add pollutants to the definition (which would be more stringent than federal law) or potentially remove pollutants from the definition (which would be less stringent than federal law). The commenter notes that Vermont may adopt a definition that is more stringent than federal law if it chooses, but may not adopt a definition that is less stringent. Another commenter is also concerned about inconsistencies in the federal and state definitions. [1,3]

Response: By statute, the term "greenhouse gas" is defined as "any chemical or physical substance that is emitted into the air and that the Secretary may reasonably anticipate to cause or contribute to climate change, including, but not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride." 10 V.S.A. § 552(11). The proposed rule adopted this definition verbatim. However, in response to comments, the Agency is modifying the definition. As revised, the final proposed rule defines the term "greenhouse gases" as "carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and any other chemical or physical substance that is emitted into the air and that the *Secretary* may reasonably anticipate to cause or contribute to climate change." The revised definition clearly identifies carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride as greenhouse gases. The revised definition also clarifies that the Secretary may only add pollutants to the definition. Should the Secretary decide to add to the list of identified greenhouse gases, the Agency will comply with the requirements of Vermont's Administrative Procedure Act. As revised, the definition of "greenhouse gases" in the final proposed rule is consistent with both the federal definition of "greenhouse gases" in EPA's Tailoring Rule and the statutory definition of "greenhouse gas" set forth in 10 V.S.A. § 552(11).

2. Comment: In order for greenhouse gases to be regulated under the federal PSD program, both the Tailoring Rule's new carbon dioxide equivalent (CO2e) threshold and the previously existing PSD mass base emission limit have to be met. Vermont's definition of

"major stationary source" appears to be more stringent by leaving out the mass base emission requirement for greenhouse gases. Vermont may adopt more stringent requirements than federal regulations require, but this stringency is not required as a matter of federal law. If Vermont desires to regulate greenhouse gases only to the extent that EPA would regulate them under 40 C.F.R. § 52.21, the commenter suggests adding a mass base emission limit for greenhouse gases to the definition of "major stationary source" and defining the term "subject to regulation" to clarify Vermont's intent. [1]

Response: To clarify the Agency's intent to have the same (and not more stringent) permitting thresholds for greenhouse gases in Vermont as required by federal regulations, the Agency is revising the definition of "major stationary source" in section 5-101 to include a mass base emission limit for greenhouse gases and adding a definition of the term "subject to regulation" to section 5-101.

3. Comment: If Vermont desires to regulate greenhouse gases only to the extent that EPA would regulate greenhouse gases under 40 C.F.R. § 52.21, in absence of an approved SIP, Vermont should consider revising its definition of "significant" as it applies to greenhouse gases to clarify that only greenhouse gas emissions that are subject to regulation by EPA are covered by Vermont's definition of "significant." [1]

   Response: The Agency agrees with the comment and is revising the proposed amendments to the definition of "significant" to take into account the commenter's suggestion.

4. Comment: Vermont's proposed amendments incorporate the tailoring thresholds from the U.S. EPA's Greenhouse Gas Tailoring Rule by stating that sources will become major for greenhouse gases if their emissions are over levels which "are subject to regulation, as defined by EPA," and by defining significance in this context as "the significance level established by EPA." The commenter urges Vermont to include specific regulatory citations to the appropriate portions of the tailoring regulations, e.g. 40 C.F.R. § 51.166(b)(48), 40 C.F.R. § 70.2(2), to make clear where the relevant EPA definitions are established. [2]

Response: As discussed in the response to Comment # 2, the Agency is adding a definition of "subject to regulation" in the final proposed rule. The definition includes the relevant citations to EPA's regulations.

5. Comment: The Agency should clarify that greenhouse gas permitting is triggered for sources that exceed federal major source thresholds, not Vermont major thresholds. [3]

   Response: The Agency is clarifying its intent that greenhouse gas permitting is triggered for sources that exceed federal major source thresholds, not Vermont major thresholds, by revising the proposed definitions of "major stationary source" and "significant" and adding a definition of "subject to regulation," as described above in the responses to Comments # 2 and # 3.

6. Comment: Vermont's proposed changes to section 5-252 could be interpreted to remove the oil sulfur limit of equipment that has a heat input capacity of greater than 250 million BTUs/hr but for which its capacity on fossil fuel alone is less than 250 million. For example, a dual fired biomass boiler capable of burning 400 MMBTU/hr on biomass and 50 MMBTU/hr on oil would be subject to the existing SIP limit on the oil's sulfur content. Vermont's proposed changes could be interpreted to remove the oil sulfur limit for this source since it is not capable of combusting 250 MMBTU/hr on fossil fuel. If interpreted this way, the proposed change would relax Vermont's SIP and may not be approved by EPA.

   Response: The proposed changes to both section 5-251 and section 5-252 were intended to make the applicability of these regulations more consistent with the applicability of the federal New Source Performance Standard (NSPS) Subpart D on which the Vermont regulations are based. Since the applicability of Vermont's existing regulations were written more broadly than the federal regulation and subsequently incorporated into Vermont's SIP in that form, EPA is stating that relaxing the regulations to be consistent with the NSPS may not be approved by EPA. In order to avoid the confusion of having a revised regulation that is not EPA-approved and a conflicting SIP requirement that is EPA-approved, the Agency is removing the term "fossil," which the Agency had proposed to add,

from the first paragraphs of both section 5-251 and section 5-252. The commenter's suggested additional language to clarify that all fuels, not just fossil fuels, need to be aggregated for applicability to the 250 million BTUs/hr threshold is therefore not necessary. The remaining clarifying additions and deletions to these regulations will remain as proposed.

7. Comment: Section 5-501 should include a de minims threshold to avoid a large volume of permits for very small sources. Additionally, section 5-501 should include reasonable time limits for Agency action on permit applications for new or modified sources. [3]

   Response: The Agency neither proposed nor sought public comments on de minims thresholds for construction permits or time limits for Agency actions on permits. Rather, the purpose of the proposed amendments to section 5-501 was merely to ensure consistency with EPA's greenhouse gas Tailoring Tule, to implement the permit streamlining measures adopted as part of Challenges for Change in 2010, and to update this section to reflect amendments to 10 V.S.A § 556 adopted in 1993. Therefore, the suggested changes are beyond the scope of this rulemaking. The Agency, however, may consider proposing and seeking comments on such changes in a future rulemaking.

8. Comment: Clarify that federal netting applies, in that there must be both a significant emissions increase and a significant net emissions increase. In addition, clarify how the greenhouse gas baseline will be defined for existing sources, for purposes of determining when a modification would require a construction permit under section 5-502(1)(b). [3]

   Response: The Agency intends for the federal netting and baseline calculation procedures to apply for applicability of permitting greenhouse gases. As discussed above, the Agency is adding a definition of the term "subject to regulation" to the final proposed regulation. The definition of "subject to regulation" adopts EPA's definition of that term, which is set forth at 40 CFR § 51.166(b)(48). EPA's definition of "subject to regulation" provides for both the thresholds for permitting greenhouse gases and how to calculate emissions increases (there must be both a significant emissions increase and a significant net

emissions increase). Thus, in adopting EPA's definition of "subject to regulation" and applying this term to greenhouse gases, Vermont intends to follow both the federal thresholds for permitting greenhouse gases and the federal procedures for netting greenhouse gases.

9. Comment: The commenter commends Vermont in trying to find a more effective and/or efficient means of notifying the public regarding permitting actions. However, federal regulations currently require notice by newspaper for permits that trigger major new source review (NSR) or Title V under the federal Clean Air Act, but Vermont may use an electronic state publication in lieu of a newspaper when providing notice to the public regarding permits required only by state law. [1]

   Response: State law recognizes electronic notification for rulemakings and air permitting actions to be a suitable and perhaps preferable method by which to provide the public with notice of such actions. The proposed amendments provide the Agency with the flexibility to give notice to the public of draft air permits by either publishing notice in a newspaper or in an electronic state publication designed to give notice to the public. However, until federal regulations allow for electronic-only notice, the Agency will continue to provide notice of draft NSR and Title V permits by newspaper publication.

10. Comment: The new definition of "emergency use engine" in section 5-101 is a positive addition. It clarifies that use of an engine during an actual emergency is in addition to the allowable 100 hours per year for routine testing and maintenance, and includes ISO New England 5% voltage reduction scenarios in the scope of "emergency purposes." However, the scope of "emergency purposes" should also include: emergency use of existing fire pumps; the pumping of water in case of fire or flood; and automatic activation of emergency systems in the absence of an actual emergency (e.g., activation of a fire pump in response to a false fire alarm resulting from a power disruption). [3]

    Response: The Agency agrees with the commenter that the definition of "emergency use engine" should include periods of time when a fire or flood make it necessary to pump

water to minimize property damage and is revising the definition of that term to incorporate these suggestions. However, the Agency does not agree that the automatic activation of emergency systems in the absence of an actual emergency should fall within the scope of emergency purposes.

11. Comment: On a case-by-case basis, EPA has allowed NOx decreases to be used for VOC emission increases to offset emissions of ozone precursors. If Vermont would like to allow for the possibility of interpollutant trading of ozone precursors, the commenter suggests adding language to section 5-502(6)(c)(i) of the proposed regulation. [1]

    Response: The Agency is adding language to section 5-502(6)(c)(i), as suggested by the commenter, to allow for the possibility of interpollutant trading of ozone precursors.

12. Comment: In section 5-1002, Vermont should remove emergency use engines and internal combustion engine generator sets less than 50 hp from the list of insignificant activities because these types of emission units could have applicable requirements such as 40 CFR part 60, Subpart IIII. [1]

    Response: The designation of an insignificant activity only has bearing on whether the emissions from such activity need to be quantified for applicability to the operating permit program under Subchapter X of the Vermont Regulations. Since the quantity of emissions from insignificant activities tends to be very small, the inclusion of their emissions would have little effect on which facilities are subject and which are not. In any event, Vermont's operating permit threshold of 10 tons per year would ensure that any facility approaching federal Title V thresholds would at a minimum require a state operating permit. In accordance with 5-1006(e)(3)(vi) and (x) of the Vermont Regulations, the operating permit application still requires the identification and description of all insignificant activities and other information relating to any applicable requirements. Therefore, the Agency does not believe it is necessary to remove emergency use engines from the list of insignificant activities in section 5-1002.

13. Comment: The commenter suggests adding the phrase "and the regulations promulgated thereunder" after the reference to the Clean Air Act in section 5-1003(b). [1]

    Response: The Agency agrees to make this change.

14. Comment: With respect to Title V subject sources, the phrase "which may include" in section 5-1007(a)(2)(v) should be revised to mandatory language such as "including" or "which shall include" for consistency with 40 C.F.R. § 70.7(h)(2). [1]

    Response: The Agency agrees to substitute the word "including" for the phrase "which may include" in section 5-1007(a)(2)(v).

15. Comment: For sources subject to the PSD or major nonattainment new source review permit programs, the proposed revisions to section 5-501 may not meet all of the procedural requirements of 40 C.F.R. § 51.166(q)(2)(ii)-(vi). Please revise to ensure each of these procedural requirements is met. [1]

    Response: The Agency revised section 5-501 in the final proposed rule to address the procedural requirements of 40 C.F.R. § 51.166(q)(2)(ii)-(vi).

16. Comment: The commenter offers general support for the proposed amendments as they will help cut pollution without burdening small businesses. [2]

    Response: The Agency acknowledges the comment.

17. Comment: Even if urged to by other commenters, Vermont should refrain from adding a "litigation clause" to its new rule, automatically suspending the effect of the rule should court challenges (even ill-advised or frivolous) to the U.S. EPA's underlying Tailoring Rule succeed. Adding such a clause would force businesses making permitting decisions to monitor the courts in order to avoid sudden, litigation-driven, changes in permit regulations. Vermont could, of course, work to alter its own rules in an orderly way should

EPA's rule be struck down, but should avoid provisions which would precipitously alter its permitting structure based on the existence of a court case which it cannot control. [2]

Response: The Agency has not received any comments urging the Agency to add a "litigation clause."

18. Comment: EPA's Tailoring Rule requires "Best Available Control Technology" (BACT) for major sources and major modifications of greenhouse gases. Section 5-502(3) of the proposed rule requires "Most Stringent Emission Rate" (MSER), but should specify BACT for greenhouse gases, which more appropriately includes consideration of energy and environmental factors, as well as economic ones. [3]

    Response: Vermont's Air Pollution Control Regulations do not use or define the term "Best Available Control Technology" (BACT) or "Lowest Available Emission Rate" (LAER). Rather, the Vermont Air Pollution Control Regulations uses the term MSER to satisfy both requirements. In short, MSER is the functional equivalent of BACT for attainment pollutants, including greenhouse gases; while, MSER is the functional equivalent of LAER for non-attainment pollutants. Therefore, when determining MSER for greenhouse gases, the Agency will rely heavily on EPA's guidance on conducting BACT analyses for greenhouse gases.

19. Comment: Section 5-1010 would potentially require the installation of control technology at an existing greenhouse gas source that could be very costly, be difficult to implement without a major reconstruction of the production facility, and severely impact the competitiveness of the source's business. Therefore, section 5-1010 should include an exemption for greenhouse gases. [3]

    Response: Section 5-1010(a) provides: "The owner/operator of a Subchapter X major source shall install, maintain, and use reasonably available control technology (RACT) to limit the discharge of air contaminants from each process unit and each fuel burning equipment unit at such subject source, if and as required by the conditions of an operating

permit." The term "RACT" is defined in section 5-101 of the Air Pollution Control Regulations as "devices, systems, process modifications, or other apparatus or techniques designed to prevent or control emissions that are reasonably available, taking into account the social, environmental and economic impact of such controls, and alternative means of emission control" (emphasis added). In other words, any controls required under section 5-1010 would have to consider the social, environmental and economic costs of the controls. Thus, the scenario described by the commenter – requiring an existing facility to install very costly control technology that would require major modifications of the facility and have severe economic impacts on the business – would not constitute RACT and therefore would not be authorized by section 5-1010. Accordingly, the Agency does not believe that an exemption for greenhouse gases is warranted based on the comment.