

Attachment D:

Connecticut Responses to EPA's Comments on the draft Connecticut 2011 Periodic Emissions Inventory

The CT DEEP noticed the draft of the 2011 PEI in July of 2015 with a tentative hearing scheduled if one was requested. There was no such request, so a hearing was not held. The only comments received on the draft documents were from EPA Region I. EPA's eight comments and the corresponding responses from Richard Rodrigue, Supervisor, and the members of the Air Bureau's Engineering and Technical Services group at the CT DEEP, are summarized below.

1. We compared CT DEEP's stationary point source emission summary tables within section 2 of the inventory to the data contained within the 2011 EPA National Emissions Inventory (NEI), version 2, and found a high level of consistency. We commend Connecticut for its efforts in providing quality air emissions data to EPA's NEI in a timely manner.

CT RESPONSE – No response or action required for this comment.

2. Although Connecticut's area source emissions tables show category level emissions at the county level, it would be helpful to include a table showing the statewide emission estimates for each area source category.

CT RESPONSE - Two tables have been added to Appendix D. These tables contain annual and daily statewide emission estimates for each area source category.

3. Connecticut's point source inventory contains emission estimates for a number of landfills, and this sector is not mentioned in the area source portion of the inventory. Connecticut should document how it ensured that emissions from all of Connecticut's landfills are addressed; are they all accounted for in the point source inventory?

CT RESPONSE - EPA's review of Connecticut's 2011 Periodic Emission Inventory (PEI) noted that the emissions from landfills were not accounted for in the area source inventory. The emissions from 3 landfills were included in the point source section of the 2011 PEI. Connecticut DEEP

estimates that the statewide area source VOC emissions from landfills, in 2011, were 246 tons. Since the area source VOC emissions from landfills were a relatively small fraction of the total VOC emitted in the state in 2011, (142, 216 tons), and all of the summary tables had been created without them, the VOC landfill emissions, were estimated for 2011, but not included in any of the summary tables.

4. Section 4.2.1, distillate oil, indicates that Connecticut accepted EPA's estimates, although this section also notes that, "The FERC-423 database and the NESCAUM analysis indicate the distillate home heating fuel oil supplied to Connecticut is less than 0.30% (sulfur) and could on average be as low as 0.20%." In light of this, did Connecticut adjust the SO₂ emission estimate for this sector?

CT RESPONSE – For home heating oil, used in residential distillate oil combustion, the following language was added to make the emissions estimate assumptions more clear: 'Connecticut adopted EPA's SO₂ estimates based on 0.30% sulfur content for this source category without adjustment'.

5. Section 3.5, Commercial Marine Vessels, indicates that Connecticut relied on EPA's annual emission estimates for use within its inventory. In deriving a typical summer day emission estimate, Table 6 of Appendix C indicates that emissions were assumed to occur uniformly throughout the year. Connecticut should explore whether suitable allocation factors exist that would allow for a more refined typical summer day estimate to be obtained. For example, information on the # of calls to ports in the state by month may be available from the local Port authorities within the state.

Additionally, in future inventory efforts Connecticut should explore using information available on the web site marinetraffic.com to calculate emissions from this sector. This site contains real time and historic information on large vessel traffic in the United States, and could enable Connecticut to obtain a more precise emission estimate from commercial marine vessels. NO_x emissions from these vessels are becoming an increasing important contributor to total NO_x emissions in the Northeast.

CT RESPONSE – Connecticut looked into using the website recommended by EPA, and although we are available to discuss the attempts we did make using this resource, we will wait to include any results from marinetraffic.com until we assemble the 2014 version of the PEI. Also, MARAMA members are talking about a regional effort for CMV in the fairly near term, to be used in future inventory efforts.

6. Section 4.5.1, Yard Waste – Leaf and Brush Species, indicates that CT-DEEP accepted EPA’s estimates for open burning of brush. This section also indicates that permits are required for permissible open burning. If resources allow, Connecticut should attempt to base future inventory estimates on permit issuance for this activity.

CT RESPONSE – We agree that there is potentially data available to better predict these emissions. However, knowing that the permits for open burning are done at the town/local levels, we believe that the collection of this data will not be done in time for the 2011 PEI. Therefore, CT will remain in acceptance of EPA’s 2011 emissions estimates from the open burning of brush, while pushing to better our data and estimates for 2014.

7. Section 4.3, Asphalt Paving – Cutback and Emulsified, indicates that Connecticut accepted EPA’s estimates. The concluding paragraph of this section is a bit confusing; it initially states that use of cutback and emulsified asphalt is prohibited during the ozone season, but concludes with the sentence, “The survey estimated that for the calendar year 2005 one hundred percent of the 26,253 gallons of cutback asphalt and 93% of the 1,572,802 gallons of emulsified asphalt were applied between June and September (no longer permitted by regulation).” Is this because Connecticut’s regulation was adopted after 2005, and has since prohibited this?

CT RESPONSE –The NONPOINT Survey indicates that we accepted EPA’s estimate and the EPA documentation indicated that 2008 activity was used to estimate 2011 emissions due to resource limitations. The final 2011 PEI draft has been updated to state the following:

EPA estimates the annual emissions in Connecticut from cutback and emulsified asphalt to be zero. Connecticut agrees with these estimates because Connecticut effectively prohibits the usage of cutback and emulsified asphalt containing greater than 0.1% VOC during the period of May 1st through September 30th (R.C.S.A. 22a-174-20(k)). Prior to the implementation of this regulation practically all of the cutback and emulsified asphalt activity in Connecticut occurred in these months. As a result of this regulation it is believed that little or no cutback and emulsified asphalt is used in Connecticut

8. Typos:

Section 2.2 of the table of contents should be edited to read “Identification of 2011 Point Sources”, rather than 2002 point sources.

On page 2-7, the equation is missing a closing parenthesis.

CT RESPONSE – These errors have been corrected in the final draft of Connecticut’s 2011 PEI.