



**REVISED**  
**STATE/MUNICIPAL FISCAL IMPACT STATEMENT**  
**Reduction in Fuel Sulfur Content**

**Agency Submitting Regulation:** Department of Energy & Environmental Protection (DEEP)

**Date:** January 21, 2014

**Subject Matter of Regulation:** Reduction in fuel sulfur content for fuel used in stationary sources for purposes other than heating

**Regulations:** Regulations of Connecticut State Agencies §§ 22a-174-19, 22a-174-19a, 22a-174-19b, 22a-174-5(a), 22a-174-5(b)(1)

**Statutory Authority:** Connecticut General Statutes §§ 22a-174, 22a-198

**Other Agencies Affected:** None

**Effective Date Used In Cost Estimate:** July 1, 2014

**Estimate Prepared By:** Wendy Jacobs      **Telephone No.:** 860-424-3457

**Estimated Cost/Revenue Impact**

**SUMMARY OF STATE COST AND REVENUE IMPACT OF PROPOSED REGULATION**

**Agency:** DEEP

**Fund Affected:** Not applicable

	<b>First Year 2014</b>	<b>Second Year 2015</b>	<b>Full Operation</b>
<b>Number of Positions</b>	0	0	0
<b>Personal Services</b>	0	0	0
<b>Other Expenses</b> Materials and supplies Maintenance	Minor or no change	Minor or no change	Minor or no change
<b>Equipment</b>	0	0	0
<b>Grants</b>	0	0	0
<b>Total State Cost or (Savings)</b>	Minor or no change	Minor or no change	Minor or no change
<b>Estimated Revenue Gain or (Loss)</b>	0	0	0
<b>Total Net State Cost or (Savings)</b>	Minor or no change	Minor or no change	Minor or no change

**Explanation of State Impact:**

The enclosed proposal is expected to have a minor to no economic impact on the state government.

DEEP is proposing to amend Regulations of Connecticut State Agencies (RCSA) sections 22a-174-19, 22a-174-19a, 22a-174-5(a) and 22a-174-5(b)(1) and adopt RCSA section 22a-174-19b to lower the maximum sulfur content standard for fuel oil combusted in a stationary source in Connecticut for purposes other than heating. Initial restrictions on the sulfur content of distillate oil sold in Connecticut would take effect in 2014 and require a fuel sulfur content of no more than 500 parts per million (ppm). A second phase of standards would take effect in 2018, requiring the sulfur content to be limited to no more than 15 ppm in distillate oil and no more than 3000 ppm in residual oil. Aviation fuel and kerosene burned in stationary sources for purposes other than heating are also subject to sulfur content standards. The proposal does not include distillate oil sold as heating oil because Connecticut General Statutes (CGS) section 16a-21a regulates the sulfur content of heating oil. When the requirements of CGS section 16a-21a are fully implemented, heating oil will be subject to the same ultimate sulfur content limitation as proposed for distillate oil used for purposes other than heating, namely 15 ppm.

The cost of compliance would fall on fuel refiners and distributors, who may pass these costs on to retail purchasers of fuel. The level of the cost increase for lower sulfur fuel, if any, is unknown and dependent on many market factors. A number of factors suggest that Connecticut fuel users will not experience an increase or will experience a very small price increase as a result of the adoption of this proposal. Diesel fuel used in vehicles, heating oil and the distillate fuel regulated by this proposal are functionally the same fuel leaving the refinery but are amended with additives and sold as different products. Domestic oil refiners have made investments in equipment to produce lower sulfur distillate fuels to comply with EPA's low sulfur requirements for distillate fuel used in transportation. As a result of actions by states in the Mid-Atlantic and Northeast to lower the sulfur content of heating oil, domestic refiners are making additional upgrades to produce low sulfur home heating oil. As distillate fuel sold as heating oil is a far larger quantity of fuel than that sold for other non-transportation purposes, the heating oil market may influence to a great degree distillate fuel market prices and availability of lower sulfur fuel.

For residual oil supplies of lower sulfur oils are now readily available and are required to be burned at Connecticut's large electric generating units and industrial boilers. This proposal is not expected to cause any price fluctuation in residual oil.

DEEP estimates that this proposal will, upon full implementation, result in a decrease in potential sulfur dioxide emissions of approximately 2200 tons per year. Public health benefits are provided by the reduction in sulfur dioxide emissions. The monetary benefits of the avoided adverse health costs have been estimated at \$18,000 per ton of sulfur dioxide emissions reduction.<sup>1</sup> The reduction in sulfur dioxide emissions will also reduce the ecosystem effects and improve visibility, although DEEP does not have a monetary value for these benefits.

According to the DEEP point source inventory, state-owned facilities burned 118,600 gallons of distillate heating oil in 2008. The amount of distillate fuel purchased for purposes other than heating is unknown, except that it is a much smaller amount than purchased for heating.

DEEP will implement the proposal with current staff and other resources.

**Explanation of Municipal Impact:** The cost impact on municipalities is expected to be minor or none. See the previous information regarding the state impact.

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<sup>1</sup> *Public Health Benefits of Reducing Ground-Level Ozone and Fine Particulate Matter in the Northeast U.S., A Benefits Mapping and Analysis Program Study.* NESCAUM. January 15, 2008.