



The Nelson A. Rockefeller Center at Dartmouth College

The Center for Public Policy and the Social Sciences

## Policy Research Shop

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# Maintaining Air Quality Monitoring Programs

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## *Creating A Financially Sustainable Permit Fee Structure*

Presented to the New Hampshire Department of Environmental  
Services, Air Resources Division

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### EXECUTIVE SUMMARY

The New Hampshire Department of Environmental Services, Air Resources Division (NHDES) is charged by the U.S. Environmental Protection Agency (EPA) to regulate air pollutant emissions within the state through a system of permits and fees. However, the system currently faces a pressing revenue challenge: emissions of pollutants that the NHDES regulates are declining, as is the funding from federal grants. At the same time, the NHDES must comply with increasing unfunded mandates from the EPA while ensuring that the permit fee system remains fiscally afloat.

This paper presents possible solutions to this problem that New Hampshire can consider. It examines the various ways in which other states' permitting fee programs have addressed their own fiscal solvency issues. This analysis is conducted utilizing data and other information received through interviews and correspondence with officials within these programs, as well as the limited broader literature on permitting fees.

The report begins by providing background information on the Clean Air Act, the permitting fee system in New Hampshire, and the challenges currently faced by the NHDES in maintaining its program. It then presents a number of solutions that other states have used to address their own problems and discusses how these solutions can be applied in a New Hampshire context, using data received from the NHDES and other states' environmental agencies. The report closes with a conclusion that summarizes the key findings and their implications for New Hampshire.

### 1. INTRODUCTION/BACKGROUND INFORMATION

#### *1.1 The Clean Air Act Overview*

The Clean Air Act (CAA) was enacted in 1963 to control air pollution on a national level.<sup>1</sup> Although the original legislation only established a basic research program to explore airborne contaminants, it quickly expanded into a comprehensive law regulating air quality issues and establishing state-based programs to regulate air pollution.

Two regulatory programs established by the Clean Air Act set the standard for emissions policy throughout the nation. The first is the National Ambient Air Quality Standards (NAAQS) Program, which sets national standards for six criteria pollutants that harm the environment and public health.<sup>2</sup> They are ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter and lead.<sup>3</sup> The second is the State Implementation Plans (SIPs) Program, which requires the states to submit SIPs to EPA, demonstrating how they will meet the NAAQS in their states. The SIPs consist of rules, technical documentation, and permit programs to regulate polluters.<sup>4</sup>

In 1990, Title V was added to the Clean Air Act. Under Title V, states with approved Part



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70 Programs, can issue Part 70 operating permits (Title V Operating Permits) to large industries that emit more than 100 tons/year of air pollutants or 10 tons/year of hazardous air pollutants.<sup>5</sup> Although the right to issue permits is given to the state, if they do not adequately address applicable requirements, the EPA has the power to veto the permit.<sup>6</sup> For states that do not adopt Part 70 Programs that are approved by EPA, EPA has the authority to administer the Title V requirements through Part 71 of the Clean Air Act.<sup>7</sup> Thus, the possibility of federal implementation of the program encourages businesses to support the state program, which they see as more cognizant of local issues and concerns.

### *1.2 New Hampshire's Permit Fee System*

Given the federal mandates established in the CAA, the NHDES has created its own permit issuance and fee structure that regulates emissions of NAAQS pollutants and generates revenue to keep the permitting programming financially sound. The NHDES's permit fee structure is comprised of six different kinds of fees: application fees, data modeling fees for sources that need to demonstrate compliance with applicable standards (NAAQS or AALs), permit review fees, testing and monitoring fees for temporary permits, permit-by-notification fees, and, most importantly, emissions-based fees. In fiscal year 2012, fees generated \$3.6 million dollars:<sup>8</sup> 97.7 percent from emission fees, 1.09 percent from application review fees, and 1.21 percent from the remaining fee types.<sup>9</sup>

### *1.3 Challenges to NHDES*

The NHDES's permitting fee system is currently facing challenges to its financial solvency due to decreased funding from the state and federal governments, increased mandates from the federal government, and declining revenue from emissions based fees. Funding from the State General Fund and the EPA together form 35 percent of NHDES revenue;<sup>10</sup> however, funding from the State General Fund has fallen significantly in recent years, and although air permit funding through the EPA's State and Tribal Assistance Grants (STAG) have remained flat over the past 10 years, there is suspicion that recent budget cuts in the EPA will lead to less federal grant money.<sup>11</sup> In addition, increasing research on the effects of emissions have led to a rise in mandates from the EPA that NHDES must abide by, usually unaccompanied by increases in funding to help NHDES meet these goals.<sup>12</sup> Finally, decreases in emissions over the past several decades as a result of environmental regulations and economic factors have resulted in fewer fee payments and, thus, lower revenue.<sup>13</sup>

## **2. POLICY OPTIONS**

To address New Hampshire's growing fiscal solvency problems, we present a number of potential solutions for the NHDES to consider. The following policy options are presented using data and information received through interviews and correspondence



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with representatives from other states' permitting fee programs. States were chosen based on their similarity to New Hampshire in terms of location, political and regulatory climate, pollution and other environmental issues, or challenges faced by their air permitting fee programs. Based on this criteria, we have examined a sample of states including Connecticut, Rhode Island, Massachusetts, Maine, and Vermont, all of which are in EPA Region 1 along with New Hampshire and were chosen for their political, regulatory, and demographic similarities. We also examine South Carolina, which was chosen for its similar industry climate to New Hampshire, and California, which was chosen for its especially progressive and successful environmental programs. By restricting our analysis to states with similarities to New Hampshire, we hope to present options that are feasible and relevant to New Hampshire while avoiding solutions that only arise in states with very different regulatory or policy contexts.

### *2.1 Vehicle Emission Fees*

In addition to Title V and small stationary emitters, another source of air pollution comes from mobile emitters, particularly motor vehicles. As stated in a report written by the US Health and Environment Subcommittee, *Car, Fuels, and Clean Air Act: A Review of Title II of the Clean Air Act Amendments of 1990*, mobile emitters in the United States are the single largest source of air pollution, representing around 50 percent of all airborne Volatile Organic Compounds (VOC) that are released into the atmosphere each year.<sup>14</sup> One option that is open to New Hampshire is the adoption/increase of an additional fee added to its current annual vehicle inspection requirements. This fee would serve as a method of increasing revenue at relatively little increased costs, while still working towards the goal of decreasing total emissions.

New Hampshire's current vehicle inspection process includes a requirement for all vehicle models newer than 1996 to pass an On-Board Diagnostics (OBD) test.<sup>15</sup> All cars registered with the State are required to have an on-board computer that measures a variety of different components of the vehicle, including emissions levels and efficiency.<sup>16</sup> The current inspection fee imposed on inspection sites (costs ultimately shared by vehicle owners) is \$3.38 per vehicle for all OBD equipped cars, including a \$0.25 fee for adding an inspection sticker.<sup>17</sup> Given that vehicle registration fees are prohibited for non-highway use by the New Hampshire Constitution, adding an additional fee to vehicle inspection stickers can provide New Hampshire with additional revenue that has minimal impact on individuals spread out over a large base of the population.<sup>18</sup> While only a few states have implemented specific inspection sticker fees targeted at emissions reductions, many states have adopted similar revenue raising measure through the use of vehicle registration fees. Although the NHDES cannot implement a vehicle registration surcharge, this report will look at Connecticut's precedent of vehicle registration charges, along with inspection sticker fees in addition to inspection sticker charges. We believe this will be useful because of the similarities Connecticut's air



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quality program shares with New Hampshire's, as well as the similarity in burdens the vehicle registration surcharge imposes on drivers.

### *2.1.1 Precedence for Motor Vehicle Fees: Vermont's Inspection Sticker Fee*

Similar to New Hampshire, the state of Vermont also uses annual vehicle inspections, along with inspection sticker fees as a means of raising revenue. Title 23, Chapter 13 of the Vermont State constitution mandates that all motor vehicles registered with the state of Vermont are required to undergo annual inspections to ensure the vehicles comply with federal and state standards.<sup>19</sup> To mark the vehicle's compliance with regulations, drivers must place an inspection sticker on the rear license plate of their vehicle.<sup>20</sup> While the cost of the inspection is allowed to vary at the discretion of the inspection sites, as of July 1, 2012, the fee for the inspection sticker itself is \$5.00 per vehicle.<sup>21</sup> This marks the second increase in the inspection sticker fee in the last five years, as the fee was raised from \$3.00 to \$4.00 in 2009.<sup>22</sup>

While the revenues generated from the inspection sticker fee imposed in Vermont have gone to the state's Department of Motor Vehicles, by tying the fee increase to vehicle emissions, New Hampshire could direct revenues generated from an increase in inspection sticker fees towards funding the air quality program. Given that the inspection sticker surcharge is \$0.25 in New Hampshire, compared to \$5.00 in Vermont, New Hampshire would have some flexibility in the level of a price increase they could impose. With about one million registered drivers in New Hampshire getting inspections every year, an increase in \$0.50 to the inspection sticker fee could raise as much as \$500,000 over the course of a year.<sup>23</sup> This could provide an opportunity for the NHDES to generate significant revenue levels spread out over a large payer base.

### *2.1.2 Precedence for Motor Vehicle Fees: Connecticut's Motor Vehicle Emissions Fee*

The Connecticut Department of Energy and Environmental Protection's (CDEEP) air quality program is very similar to that of New Hampshire. In addition to the mandatory Title V fee program that all states have, Connecticut's air quality program is funded by a combination of federal and state funding (representing about 30 percent and eight percent of revenue respectively), but also includes fees assessed on mobile emissions sources. Like various other states, Connecticut utilizes an Income Stabilization Factor (ISF) when calculating the level of fees to set for emitters.<sup>24</sup>

The state of Connecticut adopted the emissions surcharge on motor vehicles in 1990 in conjunction with the creation of the Title V fee system. The surcharge was originally calculated based on the average emissions of a motor vehicle, and priced so that the charge was equitable to the fees assessed on Title V emitters. Originally, the surcharge was priced as a \$5.00 addition vehicle registration renewals for two years for each motor vehicle. This was eventually increased to its current level of \$10.00, which takes into

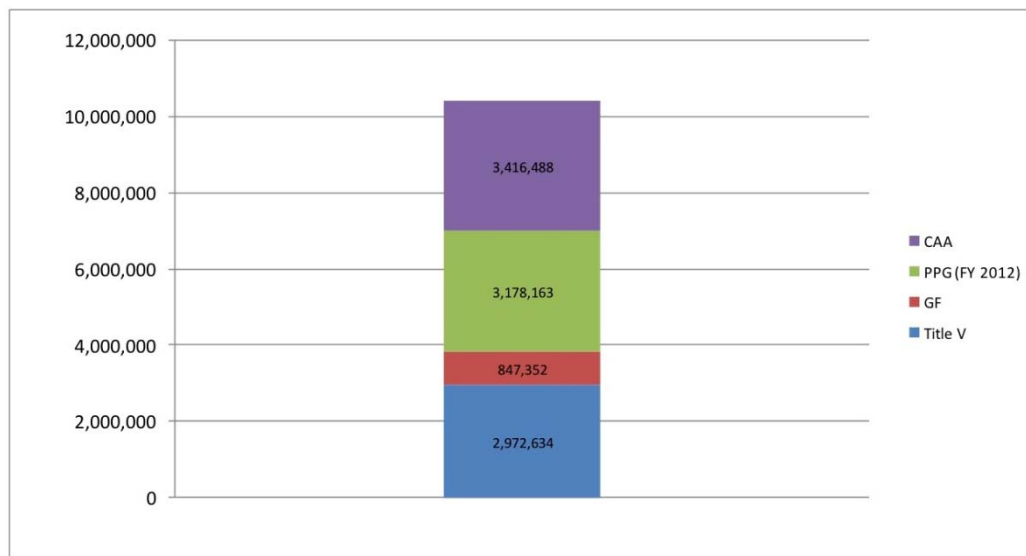


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account the opposing effects of a drop in average emissions per vehicle and the increase in the fee level for Title V sources.<sup>25</sup>

Figure 2 below highlights the expected revenue Connecticut's program for fiscal year 2013. The state is expected to bring in a total of \$10.4 million from four major sources. The largest source of revenue is the money received from the motor vehicle emission surcharge, totaling \$3.4 million, or 32.8 percent. Following this is the funding the state receives from the federal government, specifically the EPA, which totals \$3.2 million, or 30.5 percent. Revenues from emissions fees on Title V sources totals almost \$3.0 million, or 28.5 percent of revenue, and the final \$0.8 million, or 8.2 percent, comes from general state funding.

While allocating revenues from motor vehicle registration fees to the NHDES would require an amendment to the New Hampshire state constitution, the Connecticut case study still provides useful insights into the revenues that can be generated from inspection sticker fees, which can be allocated to the air quality program. Faced with similar circumstances, Connecticut chose to rely on vehicle registration fees to fund their air quality program, which has since become a significant source of revenue. New Hampshire could generate a similar revenue stream through the use of motor vehicle inspection sticker fees.



**Figure 1 – Connecticut Air Program Revenue for State Fiscal Year 2013**

(Source: Connecticut DEEP, Bureau of Air Quality Management)



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### *2.1.3 Precedence for Motor Vehicle Fees: California's Smog Abatement, Smog Transfer, and Clean Air Vehicle Fees*

The State of California's Department of Motor Vehicles and Air Resources Board have also implemented a number of different fees in order to raise revenues while trying to reduce air pollution from the over 20 million licensed drivers in the state. Beginning in 2004, the California Department of Motor Vehicles implemented a smog abatement fee of \$12.00 per year, included onto the vehicle's annual registration process.<sup>26</sup> This fee also led to the creation of a separate \$8.00 smog transfer fee, both of which are collected by the DMV and divided between the DMV's general fund, and a Vehicle Inspection and repair fund, used to check for compliance of vehicles with state emissions laws.<sup>27</sup> At the beginning of 2008, the state increased its abatement fee from \$12.00 to \$20.00, allocating \$4.00 of this increase to the state's Air Quality Improvement fund. Due to California's large size, this fee generated millions of dollars in revenues for the state's air quality program.<sup>28</sup>

In addition to smog reduction fees, the state's Air Resources Board has also helped to implement a Clean Air Vehicle Program. In Section 5205.5 of the California Vehicle Code (CVC), a vehicle that meets California's super ultra-low emission vehicle standards is eligible to get a car decal that allows a single occupant vehicle to drive in the HOV lanes throughout the state.<sup>29</sup> This \$8.00 fee is added to any vehicle inspection where the owner chooses to apply for the decal.<sup>30</sup> The goal of this fee is to incentivize drivers to use more air-friendly motor vehicles, as well as raise revenue for the state's air quality program.

While New Hampshire would not be able to implement the same smog abatement fee to motor vehicle registration, the programs implemented by California provide a number of ideas that the NHDES could pursue. Should New Hampshire decide to pursue a new fee on vehicle inspections, tying the fee to smog abatement may be one way to generate the political support necessary to pass legislation. Similarly, the implementation of a reward system for Clean Air Vehicles could provide a source of revenue for the NHDES. While California's program rewards drivers through the ability to utilize the HOV lanes, there are a number of other benefits that drivers could be provided, such as expedited service at the DMV, or priority on booking vehicle inspections at approved garages.

### *2.2 Increase Emission Charge on SO<sub>x</sub>*

A third option, increasing the charge per ton of sulfur dioxide emitted, would leverage the single largest source of air pollution in New Hampshire to raise revenue. Three pollutants have represented approximately 99 percent of NH emissions from FY2006-FY2011: sulfur dioxide (approx. 72 percent), nitrogen dioxide (approx. 14 percent) and carbon monoxide (approx. 13 percent) as demonstrated in Figure 2.





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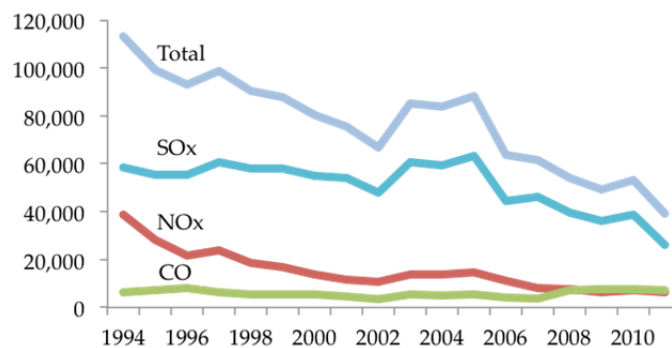


Figure 2 - Trended Emissions by Type  
(Author calculation based on NHDES data)

Sulfur dioxide has decreased at an average annual rate of nine percent per year from FY2006-FY2011; discounting the 33 percent decrease in FY2010-FY2011, the rate would drop to three percent per year between FY2006-FY2010. Sulfur dioxide, produced mainly by coal-fired power plants and paper mills in New Hampshire, has and will continue to be the most significant air pollutant in state.<sup>31</sup>

Currently, the CAGR (compound annual growth rate) of sulfur dioxide-related revenue (as with all emissions revenues) is predicted to be two percent annually given the average annual decrease of sulfur dioxide emissions (nine percent), average annual increase of per-ton fees (12 percent), and average tonnage exempt from fees (48 percent) from FY2007-2011 data. This would result in a 10 percent increase over the next five years.<sup>32</sup>

Table 1. Five Year Increase: 10 Percent

Year	SOx Revenue – 5 yr CAGR: 2%
2012(e)	\$2,161,761.07
2013(e)	\$2,203,266.88
2014(e)	\$2,245,569.61
2015(e)	\$2,288,684.54
2016(e)	\$2,332,627.29
2017(e)	\$2,377,413.73

The NHDES could increase the average annual increase of per-ton fees for sulfur dioxide from 12 percent to 23 percent, the largest increase of per-ton fees from FY1994-FY2011 (occurring in FY2008). This increase did not seem to discourage business, as state emission permits increased in the next two years, despite overall economic hardship caused by the recession. If implemented, the CAGR of the sulfur dioxide fee would increase from two percent to 12 percent and result in a five-year increase of 76 percent. Given that the average annual NHDES expense for FY2007-FY2011 was approximately



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\$4 million, a new increased sulfur dioxide fee should significantly help to relieve the financial pressure on the NHDES.<sup>33</sup>

**Table 2. Five Year Increase: 76 Percent**

Year	SOx Revenue – 5 yr CAGR: 12%
2012(e)	\$2,374,076.89
2013(e)	\$2,657,304.26
2014(e)	\$2,974,320.66
2015(e)	\$3,329,157.11
2016(e)	\$3,726,325.56
2017(e)	\$4,170,876.20

### 2.3 Introduce New Application, Review, and Processing Fees

New Hampshire's permit fee system relies heavily on emission fees to generate revenue (97.7 percent). Only one percent of revenue generation comes from the other five types of fees that are collected. However, a comparison between other Region 1 states shows that there are several fees that could be implemented in New Hampshire to increase that one percent share. First, permit application fees could be differentiated by source type. Rhode Island, for example, differentiates between five types: major source, complex minor source, minor source, toxic operating sources, and second tier.<sup>34</sup>

**Table 3 - Rhode Island Permit Application Types**

Source Type	Examples	Fee
Major Sources	Ordinary sources of major emissions, more specifically defined in the Rhode Island Air Pollution Control Regulation (APC) 9.	\$25,410
Complex minor sources	Incinerators; boilers with heat input capacity great than 30 million BTUs/hr; sources emitting a listed toxic air contaminant	\$4,620
Minor sources	Small spray-painting operations; applications for installation of air pollution control equipment; small package boilers burning oil or natural gas that are not classified as a complex minor source.	\$1,271
Toxic Operating Sources	Sources using and emitting one or more of the substances listed in APC No. 22.	\$809
Second Tier	They meet the criterion of "Toxic Operating Sources" as well as the following: Sources use/emits more than 5 of the substances listed in APC No. 22; Sources that incorrectly submits emission information	\$2,310

New Hampshire can also introduce late fees to motivate more timely payment, as well as generate revenue. This can be similar to what Connecticut has implemented for late



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payment of emission fees. If the owner of a Title V source fails to pay the emission fee in a timely manner, “a late fee of ten percent of the emission fee or fifty dollars, whichever is greater, shall be charged...the owner of operator of such Title V source shall pay an additional one and one quarter percent per month of the amount of fees required by this subsection which remain unpaid after the first day of each month.”<sup>35</sup>

### 2.4 Implement Toxic/Hazardous Emission Surcharge

Another difference between the New Hampshire permit fee system and other Region 1 states is that New Hampshire does not make a regulatory distinction between types of emissions, most notably between normally regulated NAAQS pollutants and regulated toxic/hazardous air pollutants. A revenue generating option to consider is a penalty for those who emit regulated air pollutants that are hazardous to human health. Vermont and Maine provide examples of what New Hampshire can emulate when creating such a surcharge.

Vermont has established a toxic surcharge structure that distinguishes between different types of hazardous emissions – carcinogens, chronic, irritant – as well as concentration of the emission.<sup>36</sup>

**Table 4 - Vermont Surcharge Structure**

Hazardous Air Contaminant Surcharge	
Carcinogens (high potency)	\$15/lb
Carcinogens (low potency)	\$0.825/lb
Chronic (high potency)	\$0.03/lb
Chronic (low potency)	\$0.0225/lb
Irritant	\$0.012/lb

Alternatively, Maine charges a flat “air quality surcharge of \$2.08 for every 1,000 air quality units that is added to the annual license fee.

**Table 5 - Maine Surcharge Structure**

Hazardous Air Contaminant Surcharge	
Air quality surcharge	\$2.08 per 1,000 air quality units

Air quality units are determined by multiplying the toxicity score of a hazardous air pollutant by the estimated emission on that pollutant.”<sup>37</sup> In addition, sources “reporting requirements for hazardous air pollutants that exceed the minimum air quality surcharge floor of \$147.00 are required to pay an air quality surcharge up to the maximum of \$73,684.”<sup>38</sup>



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*2.5 Develop Progressive Emission Fees*

Another potential option that the NHDES may be interested in exploring is altering its current emission fee system from a flat rate system to a progressive one.

For the Fiscal Year 2011, the DES’s emission fee system for New Hampshire businesses charges a flat rate of \$60.00 per ton of regulated air pollutant emitted multiplied by the Consumer Price Index multiplier of 1.6221 and Inventory Stabilization Factor of 1.6034 (coming to a minimum of \$156.05 fee, even if the business emits less than one ton of pollutants).<sup>39</sup> The NHDES’s current emissions fee system is distinctly different from the system of its neighboring states. For example, Massachusetts, Rhode Island, New York, and Maine each employ a progressive emission fee system, which charges a different per ton emission fee based on the amount of pollutants emitted by the business in question.<sup>40</sup> As industries emit more and more pollutants, they are subject to a higher and higher per ton price (see Tables 1,2,3,4).

**Table 6 – Massachusetts Progressive Fee System**

Massachusetts	
Progressive Fee System	From 1 to 100 tons emitted, fee per ton is \$3,000 + \$6 * (Amount of emissions)
	From 101 to 250 tons emitted, fee per ton is \$5,500 + \$8 * (Amount of emissions)
	From 251 to 5000 tons emitted, fee per ton is \$7,500 + \$25 * (Amount of emissions)
	Greater than 5000 tons emitted, fee per ton is \$100,000 + \$25 * (Amount of emissions)
Minimum fee is \$3000 and max \$287,500	

**Table 7 – Rhode Island Progressive Fee System**

Rhode Island	
Progressive Fee System	From 1 to 10 tons emitted, total fee is \$480
	From 11 to 20 tons emitted, total fee is \$1,134
	From 21 to 50 tons emitted, total fee is \$1,962
	Over 50 tons emitted, total fee is \$3,488
Minimum license fee is \$480 and max \$3,488	

**Table 8 – New York Progressive Fee System**

New York	
Progressive Fee System	From 1 to 1,000 tons emitted, fee per ton is \$45
	From 1,000 to 2,000 tons emitted, fee per ton is \$50
	From 2,000 to 5,000 tons emitted, fee per ton is \$55
	From over 5,000 tons emitted, fee per ton is \$65
Minimum license fee is \$45 and max \$455,000	



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**Table 9 – Maine Progressive Fee System**

<b>Maine</b>	
Progressive Fee System	From 1 to 1,000 tons emitted, fee per ton is \$8.20
	From 1,000 to 4,000 tons emitted, fee per ton is \$16.43
	From over 4,000 tons emitted, fee per ton is \$24.61
Minimum license fee is \$367 and max \$225,661	

The DES can consider adopting its peers’ progressive emission fee system to augment the emission fee revenue stream while keeping in line with the Department’s primary goal of encouraging state businesses to pursue clean, alternative energy plans. The tiered progressive system ensures that smaller businesses that may not have the resources to invest in alternative energy capital expenditures are not unduly punished while further incentivizing larger businesses with such reserves to prioritize emissions-reducing changes.

*2.6 Reduce Personnel*

In addition to revenue increases, the NHDES could consider taking measures to reduce internal costs. One possible money-saving option would be to reduce personnel costs. Based on other states’ strategies, there are several ways New Hampshire could do this. Rhode Island has reduced its personnel costs by directly eliminating personnel positions, while Maine and South Carolina have reduced personnel costs by waiting until positions go vacant and then leaving these positions unfilled.

Rhode Island has adopted the strategy of eliminating staff positions to reduce its personnel costs. As with many states, Rhode Island has faced rising personnel costs due to increased mandates from the federal government, scheduled salary increases, wage increases due to union negotiations, and higher benefit expenses due to the consistently rising costs of health care, social security, and other benefit programs. Funding levels from the federal and state governments have not adjusted to reflect these rising costs, meaning that funding levels have actually declined in terms of full-time employees or their equivalents funded. To compensate for this, Rhode Island has reduced the number of staff positions from 30 to 23 in the past five years. According to the Office of Air Resources, this has been a necessary move to remain fiscally solvent in the face of its rising costs and decreasing real revenue.<sup>41</sup>

The state of Maine’s Air Quality Bureau has also addressed its budget problems through the reduction of staffing expenditures. As opposed to Rhode Island, Maine addressed personnel costs by evaluating position vacancies as they occur to determine whether or not the positions are essential to the department’s functions.<sup>42</sup> South Carolina has also adopted this strategy.<sup>43</sup> This strategy has allowed the air resources divisions in these states to reduce personnel costs without resorting to directly removing employees.



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New Hampshire could consider either or both of these options as a way to reduce costs. Of the two, Rhode Island's strategy is more direct and simple; the cost savings from removing particular staff positions, in terms of salary and benefits that the Department will no longer need to provide, are clear and predictable. However, reducing staff positions directly may be undesirable for a variety of reasons, including the unwillingness to eliminate staff members who are competent and dependable, complications with union contracts that may make it difficult to remove certain positions, or difficulties eliminating positions that are seen as essential to the department's programming. The second option, which is currently used by the NHDES, allows the department to avoid these issues by simply waiting until an employee leaves voluntarily and then determining whether their position must be refilled. The NHDES' current protocol of allowing vacancies to go unfilled has resulted in a 20 percent decrease in staffing levels.<sup>44</sup> If it chooses, the NHDES can continue to reduce personnel costs through this method. However, the level of cost savings that can be achieved through this method is less predictable than simply removing staff positions, as it requires the NHDES to wait until positions go vacant. As NHDES has little control over when positions will go vacant on their own, this will make it more difficult for the NHDES to plan and strategize its cost-cutting, and there is no guarantee that enough positions will go vacant for the NHDES to sufficiently reduce its costs within a relatively short time frame.

### *2.7 Eliminate or Reduce State Initiatives to Focus on Federal Mandates*

New Hampshire could pursue the option of reducing or completely eliminating its state-directed initiatives and focus all its efforts on fulfilling federal mandates. This has been an option pursued by Rhode Island in the face of increasing unfunded mandates from the federal government. The Office of Air Resources of the Rhode Island Office of Environmental Management has eliminated nearly all of its state-run initiatives to focus on fulfilling federal mandates. For example, the state had operated a program in which state employees would oversee companies' emissions testing to ensure that the testing was conducted by an impartial third party and with the proper technique. Due to the need for increased focus on federal mandates in order to maintain federal funding, the state no longer conducts these observations.<sup>45</sup>

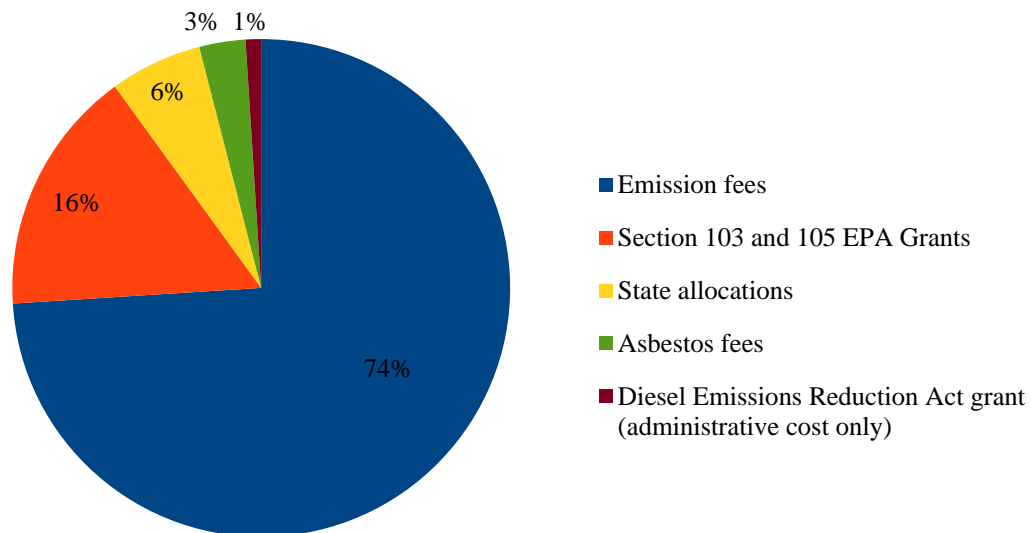
Although this option could save money by allowing the NHDES to focus its resources on federal mandates rather than trying to both fulfill federal mandates and operate its own programs, it naturally would require program cuts that may have a major impact on NHDES's operations. NHDES would have to carefully examine its programs to determine which could be eliminated while minimizing the negative effects of reducing programs.



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### 2.8 Request General Fund Assistance

South Carolina emissions fees structure is much simpler than the states covered that comprise Region 1. South Carolina's Department of Health and Environmental Services (SCDHEC) does not “assess fees for air permit applications, renewals, or revisions,” but instead “calculates air quality fees based on the tons of air emissions generated by a facility.”<sup>46</sup> In 2013, this fee rate per ton of billable emissions (which are collected for all regulated pollutants with the exception of CO and CO<sub>2</sub>) is \$45.55; this rate is adjusted based on the Consumer Price Index.<sup>47</sup> In 2012, the SCDHEC collected roughly \$9 million in fees, amounting to about 74 percent of program costs.<sup>48</sup> Anticipating a further decrease in revenues from fees as a result of fewer emissions, the SCDHEC has shifted funding for staff from fee dollars to grant dollars and state allocations (from the state legislature), kept vacant positions unfilled, as well as cut operating budgets.<sup>49</sup> The SCDHEC also has a Performance Partnership Grant with the Environmental Protection Agency that it has drawn from in order to meet budget shortfalls, but this fix is only temporary.<sup>50</sup> Figure 4 below outlines the 2012 revenue breakdown for South Carolina's Air Quality Program.



**Figure 3 – South Carolina Air Program Funding, 2012**  
South Carolina Department of Health & Environmental Control

New Hampshire, similarly, could request general funding from the state legislature as a temporary fix to cover budget shortfalls while assessing and considering options for program adaptation. According to Henry Porter, Director of the SCDHEC's Division of Emissions, Evaluation and Support, there has been "very little political contention with our request for a general fund allocation," as the requested amount was included in the



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Governor's budget request.<sup>51</sup> The House Budget Committee has voted to include the request in the budget, but it still must get through the House and the Senate.<sup>52</sup> Director Porter anticipates that the legislative outcome will be finalized in June, and has attributed the success of the request to "strong support for industry in the state."<sup>53</sup>

### **3. CONCLUSION**

There are a variety of strategies that the NHDES can pursue to address its fiscal solvency problems. This paper outlined a series of options that have been adopted by various states facing similar circumstances. While the options listed are not exhaustive, they are all viable mechanisms for the NHDES to consider. This paper also outlines some broad concerns and considerations that the NHDES will have to be aware of should it chose to implement any of these ideas.

Given the array of potential options, the NHDES may decide that a certain idea or group of ideas is more viable due to political or feasibility concerns. Should this be the case, more in-depth research can be conducted into the specifics of implementing these strategies, as well as any possible concerns or challenges that may arise. The Policy Research Shop is ready and willing to pursue further avenues of investigation should the NHDES deem such research helpful in its decision-making process.





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**APPENDICES**

Appendix 1

*The following tables are entries in the database of fee structures from Region 1, ordered alphabetically, and South Carolina.*

<b>Connecticut – One time registration payments</b>	
Application Fee	\$750 plus \$1,500 for Best Available Control Technology review or Each Lowest Achievable Emission Rate Review
New major stationary Source Permit	\$6,000
Major Modifications permit	\$6,000
New or reconstructed major source of hazardous air pollutants	\$6,000
New emission unit with potential emissions of 15+ tons	\$3,000
Modification of existing emission unit to more than 15+ tons	\$3,000
New source review non-minor permit modification	\$3,000 for Major Source, \$1,500 for Less than Major Source
New source review minor permit modification	\$3,000 for Major Source, \$1,500 for Less than Major Source
Permit Revision	\$1,500 for Major Source, \$1,500 for Less than Major Source
Permit Renewal	\$3,000 for Major Source, \$3,000 for Less than Major Source
Permit For use of Solid Fuel	\$3,000 for Major Source, \$3,000 for Less than Major Source
Permit for Air pollution Control/Energy trade	\$15,000 for Major Source, \$7,500 for Less than Major Source
Emission fee of \$25 (1989 dollars)	Up to \$500,000 can be charged from one source
Late Fee	10% of the emission fee, or \$50
Municipal emission fees	50% of what would be owed to private emitter
Transfer license fee	\$750
General permit fee	\$250
Emission test fees	\$375

<b>Maine</b>	
No fee for minor revisions, amendments, transfers, or renewals	
Minimum license fee is \$367 and max \$220,981	From 1 to 1,000 tons emitted, fee per ton is \$7.99
	From 1,000 to 4,000 tons emitted, fee per ton is \$16.01
	From over 4,000 tons emitted, fee per ton is \$23.99
Air quality surcharge for hazardous air pollutants, min \$147, max \$73,684	\$2.08 for every 1,000 air quality units (toxicity score of hazardous air pollutant multiplied by estimated emission)
Non-metallic mineral processing plant	\$100 processing fee



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Property, sales & use tax exemption certification	\$367 processing fee, \$30 licensing fee
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<b>Massachusetts</b>	
Operating Permit Enrollee	
Actual emissions is less than 100 tons	\$3,000 + \$6 * (Amount of emissions)
Actual emissions is greater than 100 tons but less than 250 tons	\$5,500 + \$8 * (Amount of emissions)
Actual emissions is greater than 250 tons but less than 5,000 tons	\$7,500 + \$25 * (Amount of emissions)
Actual emissions is greater than 5,000 tons	\$100,000 + \$25 * (Amount of emissions)
Actual emissions from Municipal Waste Combustors (10 CMR 7.08) OR NOx	\$7,500 + \$17 * (Amount of emissions)
Emissions Chargeable	Up to 7,500 Tons
Minor group One - Emissions of greater than 5 but less than 10 tons of Hazardous Air Pollutant	\$1,435
Minor group Two - Emissions of greater than 2.5 but less than 5 tons of Hazardous Air Pollutant	\$575
Minor group Three - Emissions of less than 2.5 tons of Hazardous Air Pollutant	\$260
Motor Vehicle Fuel Dispensing Facility Fee	\$200

<b>New Hampshire</b>	
Application Review Fee for Temporary Permits	\$2000 or \$1000
Application Fee for Air Toxic Reviews	\$500
Modeling Fee for Temporary new source	\$2500 or 1500
Permit-by-notification Fee	\$1,000
Permit Review Fee	Annual salary of each department worker who reviews permit, divided by 1,950
Testing and Monitoring Fee	Annual salary of each department worker who runs the tests, divided by 1,950
Emissions Based Fee	\$60 per ton of regulated air pollutant
Emissions Chargeable	Up to 6,000 tons

<b>Rhode Island</b>	
Major Source Permit	\$25,410
Complex Minor Source Permit	\$4,620
Minor Source Permit	\$1,271
Toxic Operating Sources	\$809



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Second Tier Permit	\$2,310
Stationary sources applying for general emissions cap application fee	\$250
Stationary sources applying for standard emissions cap application	\$1,100
Stationary sources approved for emission caps pay compliance fee	\$350
Emission Fee less than 10 tons per year	\$480
Emission Fee 10 to 20 tons per year	\$1,134
Emission Fee 20 to 50 tons per year	\$1,962
Emission Fee greater than 50 tons per year	\$3,488

<b>Vermont</b>	
Permit Application - Major Source	\$15,000
Permit Application - Non Major Source	\$2,000
Minor Amendments Fee (Transfer ownership)	\$150
Engineering Review Fee	\$2,000
Air Quality Impact Evaluation (Modeling)	\$2,000
Observer and Review Stack Emission Testing	\$2,000
Review and Audit Performance of Continuous Emissions Monitors	\$2,000
Review and Audit Performance of Ambient Air Monitors	\$2,000
Implement Public Comment Requirements	\$500
Emission fee for facilities with less greater than 5 tons but less than 10 tons of emissions	\$60 per ton
Emission fee for facilities greater than 10 tons of emissions	\$1,500 Base fee + \$60 per ton
Hazardous air contaminant surcharge: Carcinogens (high potency)	\$15 per pound
Hazardous air contaminant surcharge: Carcinogens (low potency)	\$0.825 per pound
Hazardous air contaminant surcharge: Chronic (high potency)	\$0.03 per pound
Hazardous air contaminant surcharge: Chronic (low potency)	\$0.0225 per pound
Hazardous air contaminant surcharge: Irritant	\$0.012 per pound
Hazardous air contaminant surcharge for fuel burned: Coal	\$0.645 per ton
Hazardous air contaminant surcharge for fuel burned: Wood	\$0.155 per ton
Hazardous air contaminant surcharge for fuel burned: Wood w/ ESP and NOx tech	\$0.0375 per ton
Hazardous air contaminant surcharge for fuel burned: #6 Fuel oil	\$0.00075 per gallon
Hazardous air contaminant surcharge for fuel burned: #4 Fuel oil	\$0.0006 per gallon
Hazardous air contaminant surcharge for fuel burned: #2 Fuel oil	\$0.0003 per gallon
Hazardous air contaminant surcharge for fuel burned: Waste oil	\$0.00075 per gallon
Hazardous air contaminant surcharge for fuel burned: LPG	\$0.0003 per gallon



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Hazardous air contaminant surcharge for fuel burned: Natural gas	\$1.305 per million BT
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<b>South Carolina</b>	
Emission fee for regulated pollutants (with the exception of CO and CO <sub>2</sub> )	\$45.55/ton
Expedited permit application (cost varies depending on type of permit)	\$1,500-\$25,000



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