The State of New Jersey
Department of Environmental Protection

Equivalent, Alternative Program Demonstration for Clean Air Act Section 185 Requirements

for

New York-N. New Jersey-Long Island (NY-NJ-CT) Nonattainment Area
Revoked 1979 1-Hour Ozone Standard

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***NOTE:** These Appendices are only available electronically

Chapter 1 INTRODUCTION

The primary purpose of this document is to demonstrate an acceptable equivalent alternative program to fulfill the Clean Air Act (CAA) Section 185 fee requirement for the New York-N. New Jersey-Long Island (NY-NJ-CT) Nonattainment Area classified as Severe-17 for the revoked 1979 1-hour ozone National Ambient Air Quality Standard (NAAQS). CAA Section 185 applies to ozone nonattainment areas classified as Severe or Extreme which fail to attain by the attainment date. The fee, applicable to major sources of volatile organic compounds (VOC) and oxides of nitrogen (NO_x), must be collected for every year following the failure to reach attainment until the area attains the NAAQS. The CAA Section 185 fee requirements are applicable to the New Jersey portion of the NY-NJ-CT nonattainment area for years 2008 and 2009.

This document demonstrates that New Jersey's Clean Energy Program (NJCEP)[1], which collects fees from electricity ratepayers on a statewide basis and uses the proceeds to fund energy efficiency and renewable energy in New Jersey, is an acceptable alternative program to satisfy the Section 185 fee program requirements for the revoked 1979 1-hour ozone NAAQS.

1.1 Background

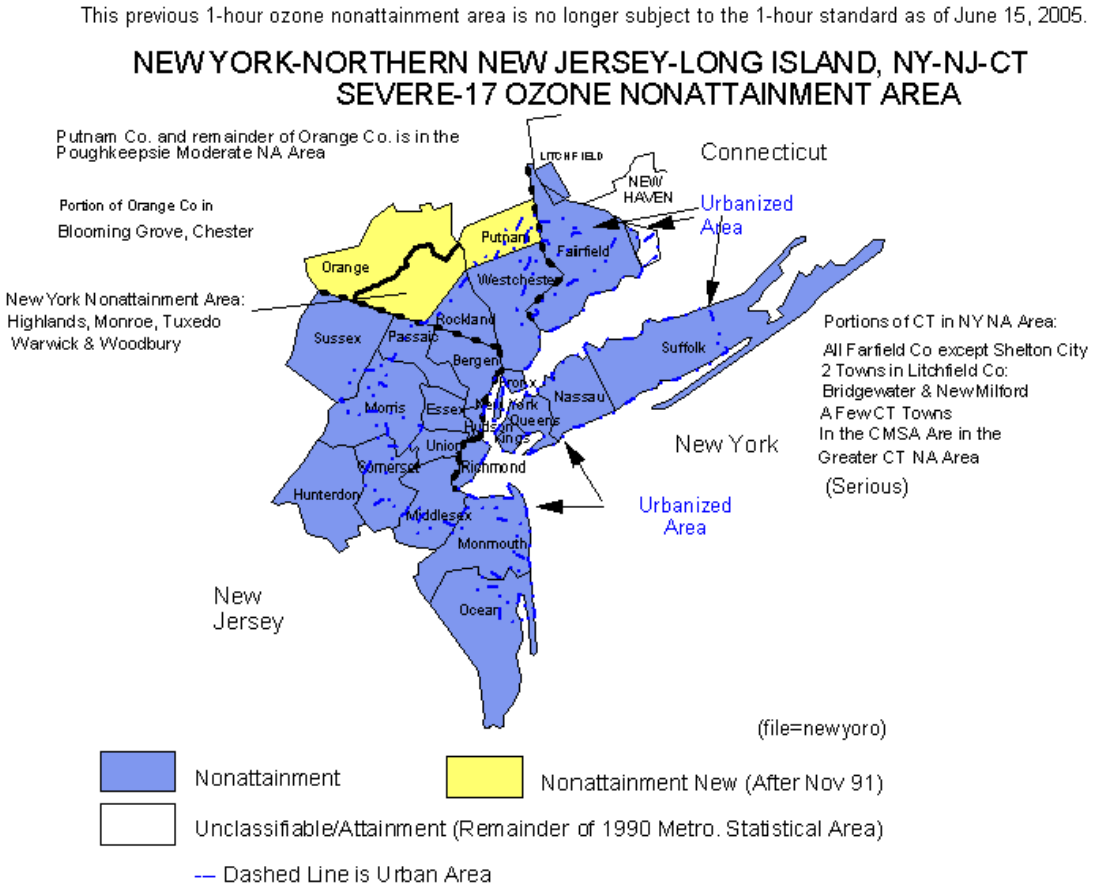
The 1979 1-hour ozone standard designations were established by the United States Environmental Protection Agency (USEPA) following the CAA Amendments in 1990. Each area of the country that was designated as nonattainment for the 1-hour ozone NAAQS was classified as either: marginal, moderate, serious, severe, or extreme, depending on the severity of the area's 1-hour ozone air quality pollution.[2] The 1-hour ozone NAAQS was set at 0.12 parts per million (ppm).

The New York-N. New Jersey-Long Island Nonattainment Area (hereafter referred to as the NY-NJ-CT Nonattainment Area) was designated as nonattainment and classified as Severe-17 in 1990 for the 1-hour ozone NAAQS with an attainment date of November 15, 2007. The 1-hour NY-NJ-CT area is composed of: Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, and Union Counties in New Jersey; Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester, and part of Orange County in New York; and parts of Fairfield and Litchfield Counties in Connecticut. See Figure 1 for a map of the nonattainment area.

[1] https://www.njcleanenergy.com/

[2] See Clean Air Act sections 107(d)(C) and 181(a)

Figure 1: New York- N. New Jersey - Long Island Nonattainment Area for the Revoked 1979 1-Hour Ozone NAAQS[3]



USEPA promulgated the more stringent 0.08 ppm 8-hour ozone NAAQS on June 15, 2004, and subsequently revoked the 1-hour ozone NAAQS the following year.[4] Originally, USEPA waived the Section 185 fee program for revoked standards, but a court decision on December 23, 2006 determined that the fee must still be applied to revoked nonattainment areas.[5]

On June 18, 2012, USEPA determined that the NY-NJ-CT 1-hour ozone nonattainment area failed to attain the 1-hour ozone NAAQS by its applicable attainment deadline of November 15, 2007, based on complete, quality-assured and certified ozone monitoring data for 2005–2007.[6] This determination of failure to attain by the attainment date triggered the provisions of CAA Section 185 for each year following the determination until the area reaches attainment. In the determination of failure to attain by the attainment date, USEPA indicated that it would address CAA Section 185 fee programs in a future rulemaking.

[3] Figure from USEPA Greenbook at https://www3.epa.gov/airquality/greenbook/newyoro.html
[4] 69 FR 23951. Revocation codified in 70 FR 44470.
[5] South Coast Air Quality Management District v. EPA, 472 F.3d 882 (D.C. Cir. 2006)
[6] 77 FR 36163 (June 19, 2012)

In the same June 18, 2012 rulemaking, USEPA determined that the NY-NJ-CT 1-hour ozone nonattainment area attained the 1-hour ozone NAAQS based on complete, quality-assured, and certified monitoring data for 2008–2010.[7] As a result of failing to attain the 1-hour ozone NAAQS by its attainment date of November 15, 2007 and attaining the standard in 2010, the requirements of CAA Section 185 fees were applicable to the area for calendar years 2008 and 2009. Since this time, complete, quality-assured, and certified monitoring data shows that the NY-NJ-CT area continues to attain the 1-hour ozone NAAQS. The alternative program described here, in addition to control measures described in recent ozone state implementation plans (SIPs), has contributed to the decreasing trend of ozone levels in the NY-NJ-CT area.

1.2 Clean Air Act Section 185 and Equivalent Alternative Programs

Requirements of the CAA Section 185 fee program apply to ozone nonattainment areas classified as Severe or Extreme that fail to attain by the required attainment date. CAA Section 185 requires each major stationary source of VOC located in an area that fails to attain by its attainment date to pay a fee to the state, for each calendar year following the attainment year. The fee is assessed based on each ton emitted in excess of 80 percent of the baseline amount. The baseline amount is the lower of the actual emissions or the allowable emissions, which is the amount allowed under the permit applicable to the source or under the SIP, during the attainment year. CAA Section 182(f) extends the application of this provision to major stationary sources of NO_x. In 1990, the CAA set the fee as $5,000 per ton of VOC and NO_x emitted, which is adjusted annually for inflation, based on the Consumer Price Index.

When transitioning from the 1979 1-hour standard to the 1997 8-hour standard, USEPA originally waived the Section 185 fee program requirements for revoked standards based on the USEPA interpretation at that time that "[USEPA] will no longer make findings of failure to attain the 1-hour standard" and that "areas that were classified as severe or extreme for the 1-hour NAAQS are not obligated to impose fees as provided under sections 181(b)(4) and 185 of the CAA under the 1-hour standard."[8] However, the United States Court of Appeals for the District of Columbia Circuit ruled on December 23, 2006 that the fee must still be applied to revoked nonattainment areas.[9] To address this, USEPA issued a memorandum, "Guidance on Developing Fee Programs Required by Clean Air Act Section 185 for the 1-hour Ozone NAAQS," dated January 5, 2010, in which USEPA describes acceptable alternative programs for CAA Section 185 requirements, consistent with the anti-backsliding principles of CAA Section 172(e).[10]

Consistent with the principles of CAA Section 172(e), a state can meet the 1- hour ozone Section 185 obligation through either the fee program prescribed in CAA Section 185 or an equivalent alternative program. An equivalent alternative program is acceptable if the state demonstrates that the alternative is "not less stringent" than the otherwise applicable Section 185 fee program and if USEPA approves such demonstration. USEPA's January 5, 2010 guidance[11] provides some acceptable alternative program options, and states have since

[7] 77 FR 36163
[8] 69 FR 23951.
[9] South Coast Air Quality Management District v. EPA, 472 F.3d 882 (D.C. Cir. 2006)
[10] https://www.epa.gov/sites/default/files/2015-09/documents/1hour_ozone_nonattainment_guidance.pdf
[11] Ibid.

successfully implemented them for various areas.[12] Although the D.C. Circuit Court of Appeals vacated this guidance in *Natural Resources Defense Council v. EPA*, 643 F. 3d (D.C. Cir. 2011), the Court did not prohibit alternative programs.

An alternative program's equivalency can be demonstrated by comparing expected fees and/or emissions reductions directly attributable to application of Section 185 to the actual fees collected/spent by the state and/or actual emissions reductions achieved from one or more alternative programs during the same period. For example, an alternative program might opt to shift the fee burden from a specific set of major stationary sources to non-major sources that also contribute to ozone formation. The program benefits, whether it be monetary or emission reductions, must correspond to the geographic region subject to the Section 185 program.

In addition, the USEPA guidance states that the fee program obligation ends when an area has attained the 1-hour or 8-hour standard due to permanent and enforceable measures. Specifically, the guidance states, "*Although Section 185 provides that fees are to continue until the area is redesignated for ozone, EPA no longer promulgates redesignations for the I-hour standard because that standard has been revoked. Therefore, relief from the 1 -hour fee program requirements under the terms of the statute is an impossibility, since the conditions the statute envisioned for relieving an area of its fee program obligation no longer can exist. There is, thus, a gap in the statute which must be filled by EPA….We believe that it is reasonable for the fee program obligation that applies for purposes of anti-backsliding to cease upon a determination, based on notice-and-comment rulemaking, that an area has attained the I -hour or 8-hour standard due to permanent and enforceable measures.*".[13]

[12] See, e.g., 77 FR 50021 (August 20, 2012) (CAA Section 185 alternative for the San Joaquin Valley Unified Air Pollution Control District); 77 FR 74372 (December 14, 2012) (CAA Section 185 alternative for the South Coast Air Quality Management District); 83 FR 62771 (December 6, 2018) (CAA Section 185 alternative for the New York portion of the New York-Northern New Jersey-Long Island Nonattainment Area)

[13] https://www.epa.gov/sites/default/files/2015-09/documents/1hour_ozone_nonattainment_guidance.pdf

Chapter 2 CLEAN AIR ACT SECTION 185 FEE EQUIVALENT ALTERNATIVE PROGRAM

The New Jersey Department of Environmental Protection (NJDEP) is demonstrating alternative program equivalency by comparing expected fees attributable to application of Section 185 to the actual fees collected/spent by New Jersey's Clean Energy Program (NJCEP) for 2008 and 2009. New Jersey's Clean Energy Program (NJCEP) collects fees from electricity ratepayers on a statewide basis and uses the proceeds to fund energy efficiency and renewable energy programs in New Jersey. This program reduces criteria pollutant emissions from fossil fuel-fired electric generating units by reducing electricity demand and fostering new clean energy resources, such as those provided by renewable energy sources.[14] NJCEP offers a variety of programs to promote energy efficiency and renewable energy sources, including appliance rebates and recycling, incentives for Combined Heat & Power (CHP) and Fuel Cell (FC) installations, discounts on residential energy-efficiency products, including rebates on HVAC equipment, and many other programs.[15]

Through NJCEP, the New Jersey Board of Public Utilities (NJBPU) established the Successor Solar Incentive Program, known as the "SuSI" Program. The SuSI program provides incentives to new solar generation facilities connected to the transmission or distribution systems of New Jersey electric public utilities or local government units.[16]

The NJCEP also oversees the Charge Up New Jersey incentive program that reduces criteria pollutants from mobile sources. On January 17, 2020, Governor Murphy signed S-2252[17] into law, which created an incentive program for light-duty electric vehicles and at-home electric charging infrastructure. Charge Up New Jersey promotes clean vehicle adoption in the state by offering incentives of up to $4,000 for the purchase or lease of new, eligible zero-emission vehicles, including battery electric and plug-in hybrid electric. Additionally, the Charge Up Residential Charger Program offers a $250 rebate for the purchase of an eligible charger for your home.

Emission benefits from NJCEP were not previously included in the State's 1-hour ozone attainment SIP and they are not included in the current New Jersey SIP. Therefore, NJCEP is an equivalent alternative program that satisfies the CAA Section 185 requirement for the New Jersey portion of the NY-NJ-CT Nonattainment Area pursuant to USEPA guidance and Sections 172(e) and 172(c)(8) of the CAA. 2.1 Emissions Baseline and Applicable Fees.

States can demonstrate an alternative program's equivalency by comparing expected fees directly attributable to application of Section 185 to the contemporaneous actual fees collected by the equivalent alternative program, in this case, NJCEP.

As stated earlier, the fee is calculated for each major stationary source of VOC and NO_x within the nonattainment area for each calendar year following the attainment year for emissions above a "baseline amount," where the baseline amount is associated with the attainment year. The fee is based on the tons of emissions in excess of 80 percent of the baseline amount.

[14] https://www.njcleanenergy.com/
[15] https://cepfindaprogram.com/ (accessed 10/9/2024)
[16] https://www.njcleanenergy.com/renewable-energy/programs/susi-program (accessed 10/9/2024)
[17] https://pub.njleg.gov/bills/2018/PL19/362_.PDF

Pursuant to CAA Section 185(b)(2), the baseline emissions are the lower of the number of actual emissions ("actual") released compared to those allowed by the permit applicable to the source or by the SIP (“allowable”) during the attainment year. For the 1-hour ozone standard, the attainment year was 2007. Baseline emissions consist of NO_x and VOC emissions reported to the New Jersey Emission Statement Program during 2007, or the allowable permit limits if lower than the actual emissions. The NO_x and VOC emissions greater than 80 percent of the corresponding NO_x and VOC baseline emissions (2007 emissions) were considered for fee obligations during 2008 and 2009.

An evaluation of permitted sources in New Jersey determined that actual emissions represent the lowest annual emissions for almost all facilities subject to Section 185 fees. NJDEP compiled facility-by-facility actual NO_x and VOC emissions from major facilities (>25 TPY) located in New Jersey’s 12 counties classified as Severe-17 nonattainment for the 1-hour ozone NAAQS during 2007, 2008, and 2009 that were reported to the New Jersey Emission Statement Program. For the 2007 base year, NJDEP compiled allowable emissions based on facility permit limits and used these limits as the established base year emissions if they were lower than the actual emissions. NJDEP calculated the fee requirement for all facilities that exceeded the major facility emission threshold (25 TPY) at least once during the three-year timespan of 2007-2009, even if the facility fell below the threshold for a different year in that span. This was to ensure the most conservative (highest) estimates for the Section 185 fee calculations.

Although USEPA January 5, 2010 guidance gives states the discretion to aggregate VOC and NO_x emissions “provided that aggregation is not used to avoid a ‘major source’ applicability finding, and aggregation is consistent with the attainment demonstration”,[18] NJDEP did not aggregate NO_x and VOC emissions but instead considered NO_x and VOC emissions separately for each major source, or facility. This was to ensure the most conservative (highest) estimates for the Section 185 fee calculations.

NJDEP’s alternative program is a fee-collection program that collects an equivalent amount of fees. Pursuant to CAA Section 185(b), the fee shall be equal to $5,000 per ton (adjusted annually for inflation beginning after 1990) emitted by the major source during the calendar year more than 80 percent of the baseline amount. USEPA publishes inflation adjusted fee rates periodically. The inflation adjusted fee rate of $8,511.33 per ton and $8,755.33 per ton for 2008 and 2009, respectively, are used to calculate fee obligations.[19]

Table 1 displays the total sum of the individual major source actual NO_x and VOC emissions for 2007, 2008, and 2009. The full calculations and individual source emission values are provided in Appendix 1.

Table 2 displays the Section 185 fee obligations in US dollars for NO_x and VOC emissions during 2008 and 2009 for all major sources located in New Jersey counties within the 1-hour ozone NY-NJ-CT Nonattainment Area. This was calculated by totaling the individual source emissions over 80 percent of the baseline year emissions multiplied by the inflation-adjusted fee rate.

[18] https://www.epa.gov/sites/default/files/2015-09/documents/1hour_ozone_nonattainment_guidance.pdf
[19] https://www.epa.gov/system/files/documents/2024-01/memorandum_sec-185-penalty-fees-for-year-2023_10-12-2023.pdf

Equation 1 demonstrates this calculation performed for each major source, where the "Yearly Emissions" are in tons per year (tpy) and the "Fee" is in dollars per ton ($/ton).

The consumer price index (CPI) adjusted fee rates, "Fee", were $8,511.33 per ton for 2008 and $8,755.33 per ton for 2009.

Equation 1: $Fee\ Obligations = (Yearly\ Emissions - 80\%\ Baseline\ Emissions) * Fee$

Additional details, including the individual source calculations, are provided in Appendix 1.

Table 1: Total Major Source NO_x and VOCs Emissions in 2007, 2008, and 2009

Year	NO_x Emissions (tpy)	VOC Emissions (tpy)	Total Emissions (tpy)
2007	12,884	5,854	18,738
2008	12,010	5,304	17,314
2009	9,316	4,203	13,519

Table 2: Total Major Source Fee Obligations for NO_x and VOCs in 2008 and 2009

Year	NO_x Fees (Millions)	VOC Fees (Millions)	Total Fees (Millions)
2008	$ 17.17	$ 6.57	$ 23.74
2009	$ 9.26	$ 3.85	$ 13.11
Total	$ 26.43	$ 10.42	$ 36.85

2.2 Fee Equivalency with the Fees from New Jersey's Clean Energy Program (NJCEP)

The actual amounts of fees expended by NJCEP were documented in annual reports for 2008 and 2009.[20] These reports provided expenditures on a statewide basis. In order to allocate the expenditures to the 12 New Jersey counties in the 1-hour ozone nonattainment area, the resident population ratio of these counties to all of New Jersey was used to calculate the portion of NJCEP fees that can be attributed to the nonattainment area. The resident population ratios were 73.45 percent in 2008 and 73.54 percent in 2009. This was multiplied by the total amount of fees expended in 2008 and 2009 to obtain the portion of fees applicable to the New Jersey portion of the NY-NJ-CT Nonattainment Area.

Table 3 shows a summary of these populations, their ratios, and the corresponding fees for NJCEP. Additional details are provided in Appendix 2.

[20] https://njcleanenergy.com/main/public-reports-and-library/financial-reports/clean-energy-program-financial-reports/financial-report-archive

Table 3: Population Ratio of Northern New Jersey Counties in the 1-Hour Ozone Nonattainment Area to the State of New Jersey in 2008 and 2009 with the Corresponding NJCEP Actual Fee Expenditures

	2008	2009
NJ Portion of 1-Hour NY-NJ-CT Nonattainment Area Population	6,398,675	6,439,099
Entire State of NJ Population	8,711,090	8,755,602
Population Ratio	73.45%	73.54%
NJCEP Fees Expended – Entire State	$147,550,000	$178,164,200
NJCEP Fees Expended – NJ Portion of 1-Hour NY-NJ-CT Nonattainment Area	$108.38 Million	$131.03 Million

Chapter 3 TRENDS IN NJCEP FEES AND EMISSIONS FROM MAJOR SOURCES

In order to consider relative changes in actual emissions from major sources and amounts of NJCEP actual fee expenditures over time, NJDEP compiled NJCEP actual fee expenditures and total major source NOx and VOC emissions from 2008 to 2022 using the same methodology described above in Chapter 2. NJDEP also calculated theoretical 185 fee obligations for 2022 using the same methodology. The following charts illustrate trends since 2008, comparing the change in the actual amounts of the NJCEP fees to both the 185 fees and the actual total major source emissions.

Chart 1 compares annual NJCEP actual fee expenditures to calculated CAA Section 185 fee obligations. Fee obligations for CAA Section 185 were calculated for major sources that emitted greater than 25 tpy in 2008, 2009, and 2022. Calculation of CAA Section 185 fee obligations for interim years between 2009 and 2022 were not required because, as shown in Chart 1, the annual Section 185 fees are relatively small, while the annual NJCEP fees expended are much greater and the trend is consistently increasing (positively sloped). Therefore, it's unnecessary to calculate the 185 fees for each interim year to conclude that the NJCEP fees expended far exceed the Section 185 fees throughout this period and into the future.

Using the methodology described above in Chapter 2, CAA Section 185 fees were calculated by summing the individual source emissions over 80 percent of the baseline year emissions multiplied by the inflation-adjusted fee rate. The CPI adjusted fee rate was $11,222.00 per ton for 2022. Also using the methodology described above in Chapter 2, NJCEP actual statewide fee expenditures were allocated to the New Jersey portion of the 1-hour ozone nonattainment area using resident population ratios of the 12 counties to all of New Jersey. Allocated annual NJCEP actual fee expenditures were compiled from 2008 to 2022. Chart 1 demonstrates that the annual NJCEP actual fee expenditures have consistently far exceeded the calculated CAA Section 185 fees from 2008 to the present. Additional details regarding Chart 1 are provided in Appendices.

Chart 1: CAA Section 185 Fee Obligations Compared to NJCEP Actual Fee Expenditures

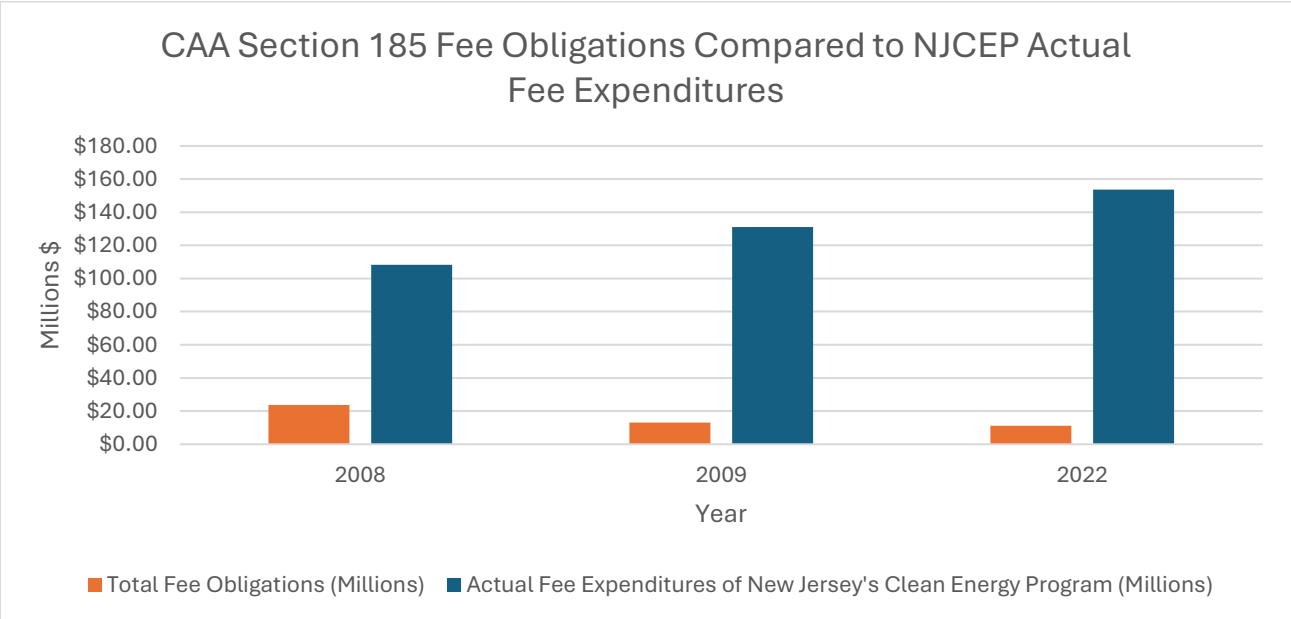
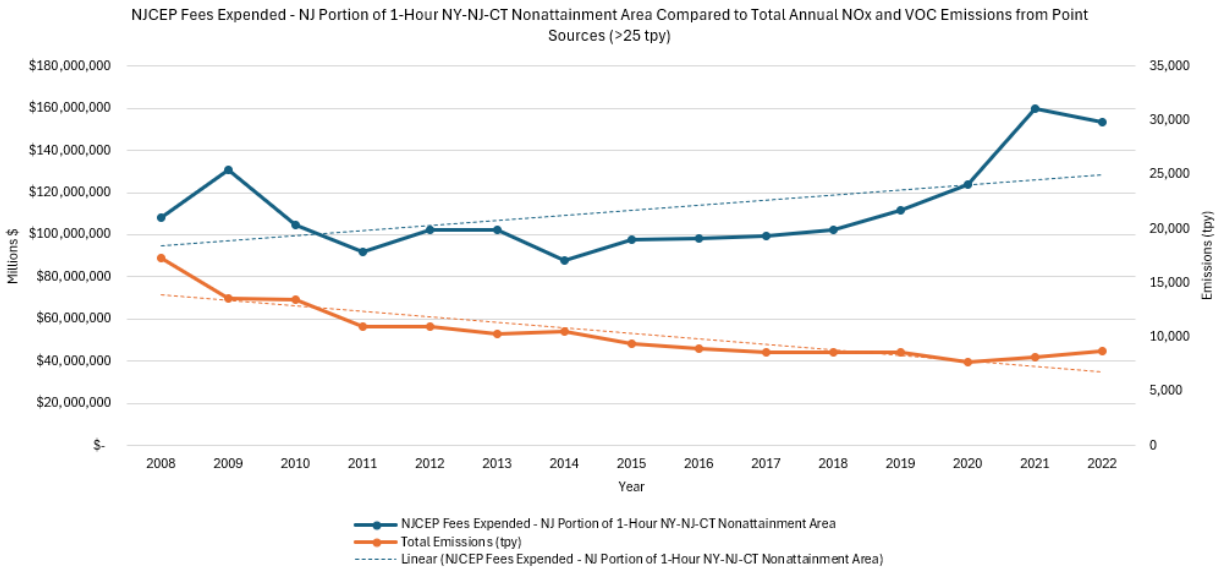


Chart 2 compares annual NJCEP fees expended and total annual NOx plus VOC emissions from point sources in the New Jersey portion of the NY-NJ-CT 1-hour ozone nonattainment area[21]. NJCEP fee expenditures allocated to the NY-NJ-CT nonattainment area are the same values provided in Chart 1. Chart 2 demonstrates that the annual NJCEP actual fee expenditures have trended upwards while emissions from major sources have trended downwards from 2008 to the present. These trends are expected to continue in the future. Details regarding the individual source emission values for NOx and VOC emissions from 2008 to 2022 are provided in Appendices.

Chart 2: NJCEP Fees Expended – NJ Portion of the 1-Hour NY-NJ-CT Nonattainment Area Compared to Total Annual NOx and VOC Emissions from Point Sources (>25 tpy)



[21] Emissions Data downloaded from USEPA Emissions Inventory System (EIS) Gateway, Data Sets: New Jersey Department of Environmental Protection, on August 29, 2024.

Chapter 4 CONCLUSION

The actual fees expended by New Jersey's Clean Energy Program (NJCEP) allocated to the New Jersey portion of the NY-NJ-CT 1-hour ozone Nonattainment Area significantly exceeded the fee obligations under CAA Section 185, as summarized in Table 4.

Table 4: NJCEP Actual Fee Expenditures from 2008 and 2009 Compared to the Fee Obligations of CAA Section 185

Year	185 Fee Obligations for NO_x (Millions)	185 Fee Obligations for VOC (Millions)	Total Estimated 185 Fee Obligations (Millions)	Actual Fee Expenditures of NJCEP (Millions)
2008	$ 17.17	$ 6.57	$ 23.74	$ 108.38
2009	$ 9.26	$ 3.85	$ 13.11	$ 131.03
Total	$ 26.43	$ 10.42	$ 36.85	$ 239.41

New Jersey has demonstrated that the actual fees expended by NJCEP were at least as much as those that would have been collected from direct application of the CAA Section 185 fees. Based on the differences between the last two columns in Table 4, NJCEP expenditures exceeded the Section 185 fee obligations by $84.64 million in 2008 and $117.92 million in 2009.

Since the actual fees expended by NJCEP were not less stringent than the fees required by the emissions in excess of 80 percent of the 2007 baseline, the alternative program is consistent with the anti-backsliding provisions of CAA Section 172(e). Therefore, NJCEP fulfills all requirements for an acceptable Clean Air Act Section 185 Fee Equivalent Alternative Program for the revoked 1-hour ozone NAAQS.