

**Revisions to the State Implementation Plan (SIP) for the Control of Ozone Air Pollution
Limited Maintenance Plan for the Midcoast Maine Ozone Maintenance Area**

1. Background

Under the 1990 Clean Air Act Amendments (CAA) nine Maine counties were designated as nonattainment for the 1979 1-hour National Ambient Air Quality Standard (NAAQS) for ozone: York, Cumberland and Sagadahoc counties (Planning Area 1); Androscoggin and Kennebec counties (Planning Area 2); and Knox and Lincoln counties (Planning Area 3) were designated as "moderate" nonattainment, while Waldo and Hancock counties (Planning Area 4) were designated as "marginal" nonattainment for ozone.

On July 16, 1997, the U.S. Environmental Protection Agency (EPA) issued updated final air quality 8-hour standards for ozone. After an extensive scientific review, EPA concluded that the 1-hour ozone standard did not provide sufficient health protection against extended periods of moderately elevated ozone. The 1997 8-hour ozone NAAQS (set at a level of 0.084 parts per million (ppm)) was based on an 8-hour average of ozone concentrations and more directly related to ozone concentrations associated with health effects.

Maine had two nonattainment areas under the 1997 ozone standard. The Midcoast Ozone Maintenance Area consists of 55 coastal towns and islands in Hancock, Knox, Lincoln and Waldo counties, and was designated as a "Basic/General" nonattainment area for the 8-hour ozone standard (see Figure 1)¹. Based on 2003-2005 monitoring data, this area was meeting the 1997 ozone NAAQS. In 2006, the Maine Department of Environmental Protection (Department) submitted a request to redesignate this area to attainment and approve a 10-year maintenance plan pursuant to section 175A of the CAA demonstrating that the area will maintain compliance with the NAAQS for at least 10 years after EPA approval of the redesignation request. The Department's redesignation request was approved on December 11, 2006.²

Section 175A(b) of the Clean Air Act also requires that areas designated non-attainment submit a second 10-year maintenance plan demonstrating continued compliance with the NAAQS during the 10-year period following the expiration of the first maintenance plan. The second 10-year maintenance plan for the Midcoast Ozone Maintenance Area is required to address the period from 2016 through 2026.

Maine did not previously address the requirement for a second 10-year maintenance plan due to EPA's 2015 promulgation of a final rule³ implementing the 2008 ozone NAAQS. Under EPA's 2015 implementation rule, states were no longer responsible for developing and submitting maintenance plans for former nonattainment areas under the 1997 ozone NAAQS (subject to conditions).

Environmental groups subsequently challenged parts of this rule and filed a petition for judicial review of several aspects of EPA's implementation rule. Included in the challenge was EPA's excusal of former 1997 ozone nonattainment areas (i.e., redesignated areas) that were designated as attainment for the 2008 ozone standard, from requirements to submit a second maintenance plan for the 1997 ozone standard⁴.

¹ The other 8-hour ozone nonattainment area is the York, Cumberland, Androscoggin and Sagadahoc "Marginal" nonattainment area consisting of 57 coastal towns and islands in these counties.

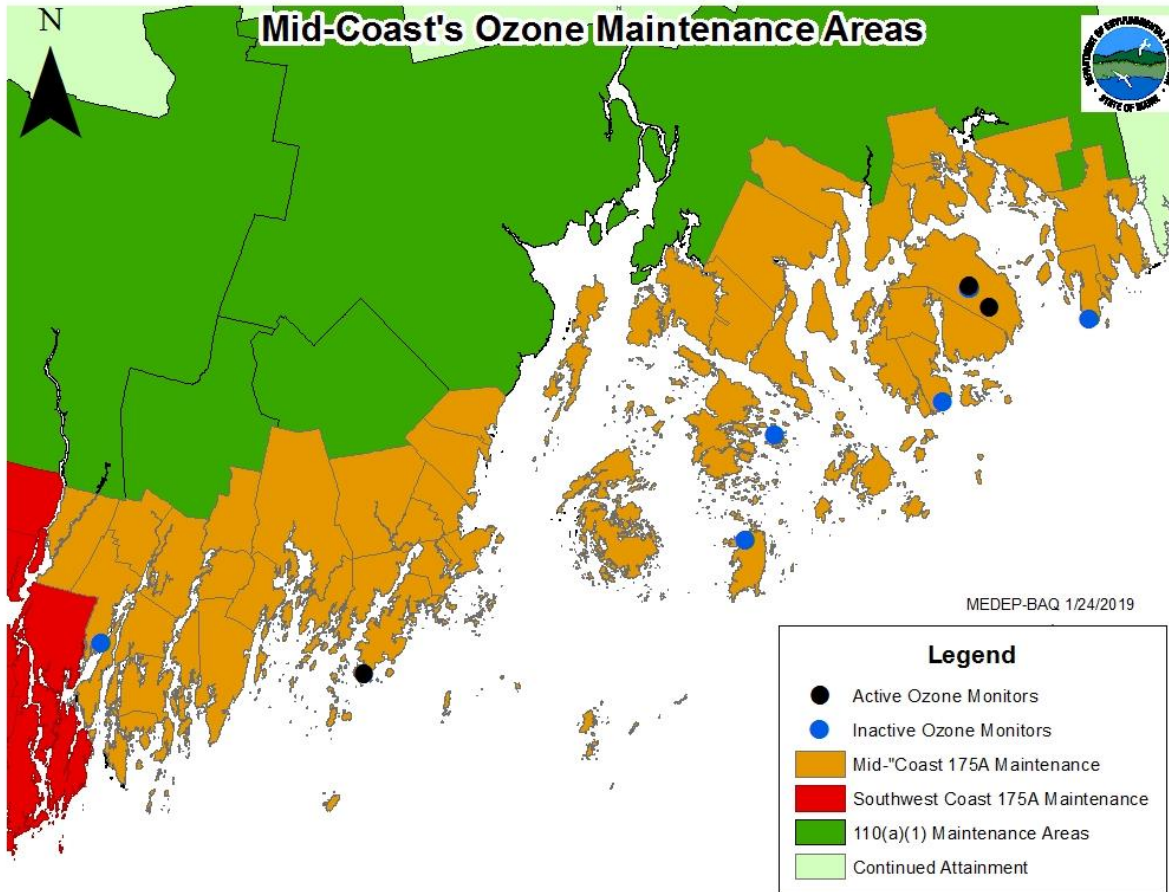
² 71 FR 71489

³ Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements 80 FR 12264

⁴ The 2008 ozone NAAQS was established at 75 ppb for an 8-hour average.

On February 16, 2018, The D.C. Circuit Court issued a decision in *South Coast Air Quality Management District v. EPA* that granted this and other parts of the petitioner’s challenge.⁵ The Court held that

Figure 1
The Midcoast Ozone Maintenance Area and Monitoring Sites



“orphan maintenance areas”, such as the Midcoast Ozone Maintenance Area are required to submit second maintenance plans under section 175A(b) of the CAA.

2. The Limited Maintenance Plan Option for Second 10-Year Plans

Section 175A of the CAA establishes the general framework for maintenance plans, including a requirement that the maintenance plan must provide for maintenance of the NAAQS for at least 10 years after redesignation⁶, including any additional control measures necessary for continued maintenance.

⁵ 882 F.3d 1138

⁶ Section 175A also requires the submittal of an additional plan to provide for maintenance for a second follow-on 10-year period.

Maintenance plans must also contain contingency measures that can be promptly implemented if a violation of the NAAQS occurs after redesignation.

Beyond basic requirements however, Section 175A of the CAA does not define the contents of a maintenance plan. As a result, EPA possesses the authority to exercise reasonable discretion when determining these requirements, and in November 1994, issued guidance on a limited maintenance plan option for a subset of ozone nonattainment areas.⁷ The EPA guidance memo states that to qualify for the limited maintenance plan option, an area's air quality design value must no more than 85% of the NAAQS, or 0.071 ppm for the 1997 ozone standard.⁸

EPA's Limited Maintenance Plan (LMP) guidance specifies that such plans should include the following components:

- 1) **Maintenance Demonstration.** For the LMP option, the maintenance demonstration requirement will be satisfied if the area meets the air quality criteria necessary to qualify. (There is no need to project emissions over the maintenance period).
- 2) **Emissions Inventory.** A current emissions inventory (attainment/maintenance inventory), which can be used to demonstrate attainment of the NAAQS;
- 3) **Monitoring Network Verification of Continued Attainment.** To verify the attainment status of an area over the maintenance period, the maintenance plan should contain provisions for the continued operation of an appropriate, EPA-approved air quality monitoring network in accordance with 40 CFR part 68.
- 4) **Contingency Plan.** Contingency provisions, to make prompt correction of any violation of the NAAQS that may occur after the redesignation of the area to attainment. The contingency plan is an enforceable part of the SIP, and the contingency measures will be adopted as soon as possible if such measures are triggered by a specific event.

Unlike full maintenance plans, limited maintenance plans are not required to include a projection of emissions over the maintenance period. In addition, emissions budgets for transportation and general conformity are not constraining where there is an approved limited maintenance plan in accordance with EPA's guidance. Approval of this limited maintenance plan will satisfy the "budget test" under both conformity rules during the maintenance period "*because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the ozone NAAQS would result.*"

3. Maintenance Demonstration

EPA's 1994 guidance states that meeting the criteria for a limited maintenance plan (a design value no greater than 85% of the NAAQS), also satisfies the requirement for a maintenance demonstration. The guidance states:

The EPA believes if the area begins the maintenance period at or below 85 percent of the exceedance levels, the air quality along with the continued applicability of PSD requirements,

⁷ Memorandum from Sally L. Shaver, Director, Air Quality Standards and Strategies Division, "*Limited Maintenance Plan for Non-Classifiable Ozone Nonattainment Areas.*" November 16, 1994.

⁸ While the 1994 guidance addressed the 1990 1-hour ozone standard, extending its 85% applicability threshold to the 1997 8-hour ozone standard yields provides a new design value threshold of 0.071 ppm.

any control measures already in the SIP, and Federal measures, should provide adequate assurance of maintenance over the initial 10-year maintenance period.

A summary of the 2018 ozone data for the Midcoast Ozone Maintenance Area is shown in Table 1. Maine operated 10 ozone monitoring sites in the area during this year. All sites achieved the required 75% or greater data capture for the year and are significantly below both the 0.084 ppm 1997 ozone NAAQS and the 2003-2005 redesignation design values.

Table 1
Summary of Design Values (ppm) for the Midcoast Ozone Maintenance Area

Site Name	AQS Code	POC	2003-05 Design Value	2016-18 Design Value
Port Clyde	230130004	2	0.069	0.063
Cadillac Mt Summit	230090102	1	0.074	0.070
McFarland Hill	230090103	1	0.069	0.063
MAXIMUM Midcoast Ozone Maintenance Area			0.074	0.070

Ozone values in Maine have been trending downward for years. Figure 2 shows the ozone design values for monitors in the Midcoast Ozone Maintenance Area. Since the early 2000s, design values in this area have declined from nearly 90 ppb to less than 70 ppb due to local, regional and national controls on emissions of volatile organic compounds and nitrogen oxides.

Figure 2

Midcoast Maintenance Area 1997 NAAQS Ozone Design Values

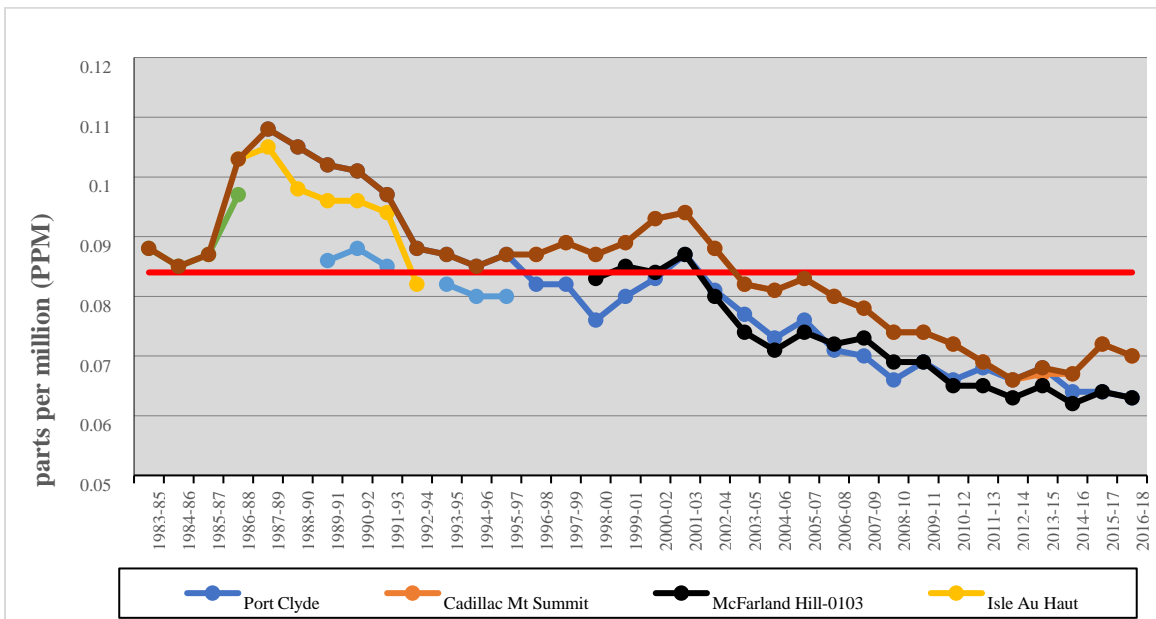


Table 2 presents the ozone design values for the Midcoast Ozone Maintenance Area since 2009 in tabular form. Again, ozone concentrations continue to decrease throughout this region and are well below the 85% threshold (71 ppb) established in EPA’s 1994 Limited Maintenance Plan guidance.⁹

Table 2
Midcoast Ozone Maintenance Area Ozone Design Values (ppm) Since 2009

AQS Code	Site Name	2007-09	2008-10	2009-11	2010-12	2011-13	2012-14	2013-15	2014-16	2015-17	2016-18
230130004	Port Clyde	0.070	0.066	0.069	0.066	0.068	0.066	0.068	0.064	0.064	0.063
	Cadillac Mt										
230090102	Summit	0.078	0.074	0.074	0.072	0.069	0.066	0.067	0.067	0.072	0.070
	McFarland Hill-										
230090103	0103	0.073	0.069	0.069	0.065	0.065	0.063	0.065	0.062	0.064	0.063
	1997 NAAQS	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084
	MAXIMUM DV	0.078	0.074	0.074	0.072	0.069	0.066	0.068	0.067	0.072	0.070

4. Attainment and Maintenance Emissions Inventories

EPA’s redesignation guidance provides that maintenance plans must include an attainment emissions inventory that identifies a level of emissions in the area that is sufficient to attain and maintain the NAAQS. That is, redesignation and maintenance plans should affirmatively demonstrate that nonattainment area emissions of NOx and VOC are projected to remain at or below a level that is consistent with demonstrated attainment throughout the 10-year maintenance plan period. Although EPA’s 1994 “*Limited Maintenance Plan Option for Nonclassifiable Ozone Nonattainment Areas*” guidance indicated that areas eligible for a limited maintenance plan need not demonstrate maintenance using emission inventory projections, the Department has included this information in support of its limited maintenance plan request.

Source Categories

The inventories for the Midcoast Ozone Maintenance Area are composed of point, area, and mobile sources of NOx and VOC emissions, expressed as tons per summer weekday. Emissions data are based on a number of factors including level of industrial activity, population, and vehicle miles traveled for a typical summer weekday, and have been prepared according to EPA guidance and requirements. The ozone attainment and maintenance emission inventories consist of the following source categories:

1. Point Sources. Point sources include industrial, electric generation, commercial/institutional and large residential facilities. Facilities licensed to emit above certain threshold values submit annual activity and emissions data to the Department’s point source database, which is then verified by the Department for each facility, using continuous emissions monitoring systems (CEMS) data, stack test data, or AP-42 or other appropriate emission factors.
2. Area Sources. The area source emission inventory consists of gasoline distribution sources, stationary fuel use, stationary solvent use, bioprocess sources, catastrophic/accidental releases,

⁹ Appendix A presents the 8-hour ozone 4th high values and design values from monitored ozone data and calculations for all sites in the Midcoast Ozone Maintenance Area since 1977.

solid waste incineration, and other stationary area sources. Emissions are calculated using EPA emission factors applied to activity level data obtained through a variety of means.

3. **Mobile Sources.** The mobile source emission inventory contains two sub-categories: onroad and nonroad. Onroad mobile sources include cars, trucks and buses. Nonroad mobile sources include aircraft, rail locomotives, boats, residential lawn/garden equipment and industrial/commercial construction off-road engines. Mobile source emissions were estimated with EPA's MOBILE6 model for the Department's 2006 redesignation request and the MOVES2014 for 2014 and projected 2028 emission inventories.

Comparison of the 2005, 2014 and 2028 Inventories

Table 3 provides a comparison of the 2005 (redesignation), 2014, and 2028 (projected) NOx and VOC inventories for the Midcoast Ozone Maintenance Area and demonstrates that emissions in this area have and will continue to decline for the duration of the second 10-year maintenance period.¹⁰

Table 3

VOC and NOx Emissions in Tons per Summer Day for the Midcoast Ozone Maintenance Area (Lincoln, Knox, Waldo and Hancock Counties)¹¹

Category	2005		2014		2028	
	VOC	NOx	VOC	NOx	VOC	NOx
Point	1.52	4.53	1.96	5.05	1.98	3.19
Nonpoint	14.21	3.66	5.12	4.22	4.78	3.97
Mobile: Onroad	8.66	15.30	4.41	8.82	1.17	1.60
Mobile: Nonroad	13.73	4.71	8.20	4.18	4.61	2.79
Total	38.12	28.20	19.69	22.27	12.54	11.55

Figures 4 and 5 illustrate the decline in VOC and NOx emissions in graphical form. By 2028, total VOC emissions for Lincoln, Knox, Waldo and Hancock Counties are forecast to decline by more than 59 percent. NOx emissions are forecast to decline even further, with the four-county area seeing a more than 67 percent decrease between 2005 and 2028.

¹⁰ 2005 emission were obtained from the Department's 2006 redesignation request as approved on December 11, 2006 (71 FR 71489). The 2014 emissions inventory information is from the EPA 2014 version 7.0 modeling platform. The inventory documentation for this platform can be found at: <https://www.epa.gov/air-emissions-modeling/2014-version-70-platform>. The 2028 emissions inventory is projected from the EPA 2011 version 6.3 modeling platform. The inventory documentation for this platform can be found at: <https://www.epa.gov/air-emissions-modeling/2011-version-63-platform>.

¹¹ The 2005 (attainment), 2014 and 2028 inventories are based on county-wide emissions.

Figure 4

Midcoast Ozone Maintenance Area
VOC (tons per summer day)

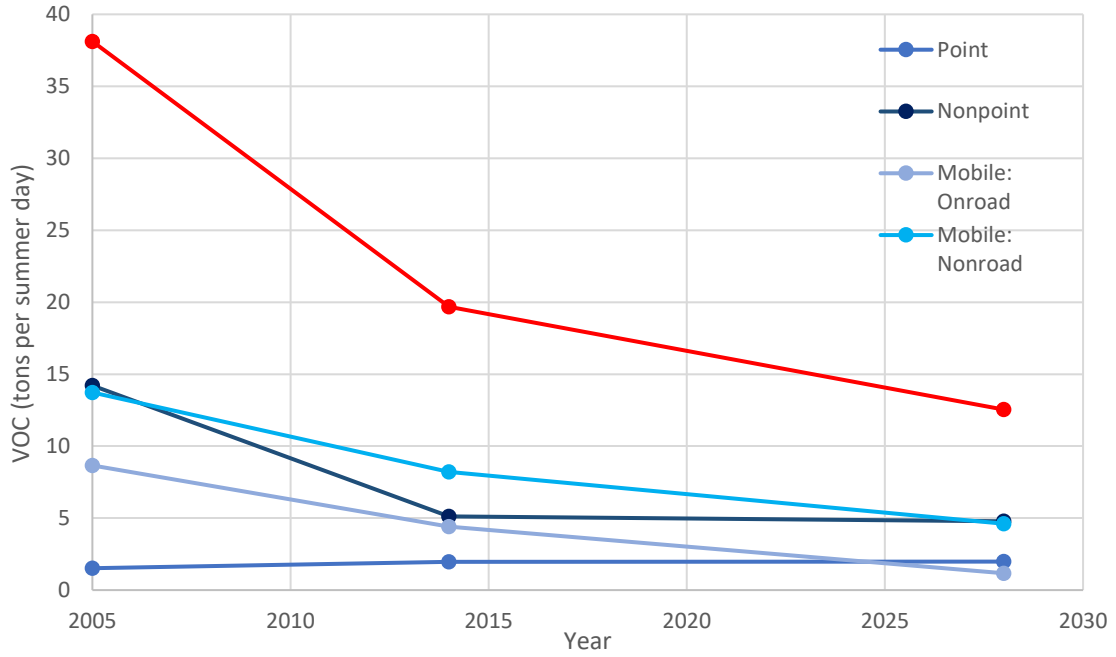
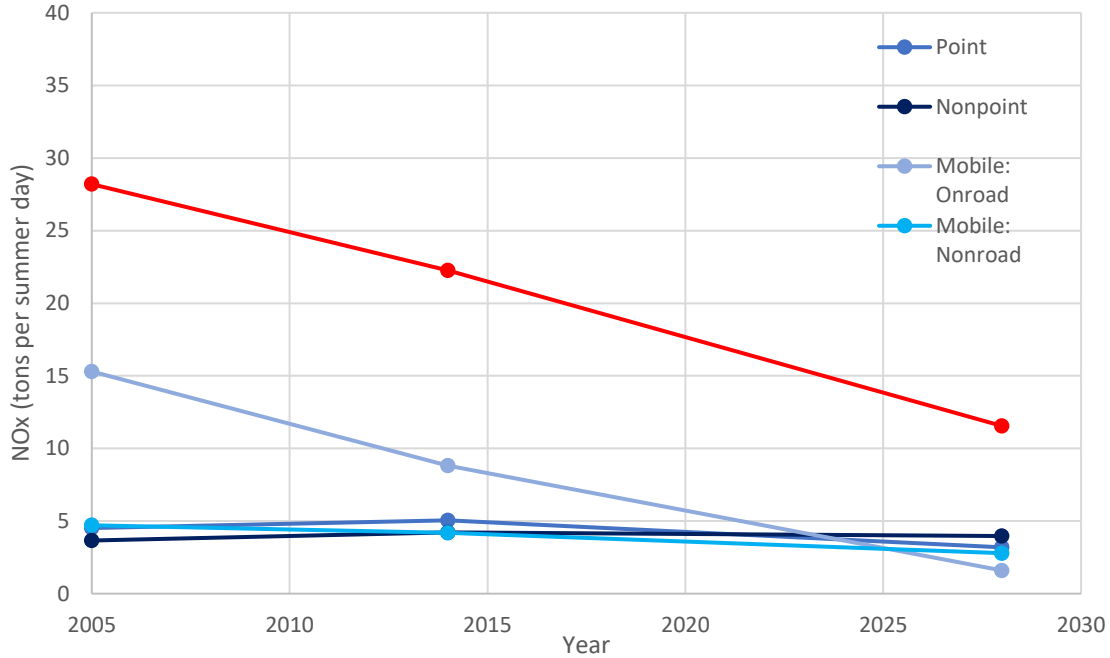


Figure 5

Midcoast Ozone Maintenance Area
NOx (tons per summer day)



5. Modeling

Although EPA’s guidance does not require modeling for ozone nonattainment areas seeking redesignation, under the limited maintenance plan option, extensive modeling has been performed to determine the effect of national and regional emission control strategies on ozone air quality in Maine and throughout the eastern United States. In June 2018, EPA released updated air quality modeling for the 2008 and 2015 ozone NAAQS utilizing the Comprehensive Air Quality Model with extensions (CAMx). CAMx is a three-dimensional grid-based Eulerian air quality model designed to simulate the formation and fate of oxidant precursors, primary and secondary particulate matter concentrations, and deposition over regional and urban scales.¹² Using a 2011 base year, EPA forecast ozone concentrations for 2023 under alternative scenarios that included a modified version of the “3x3” grid approach for those monitors located in coastal areas. In the modified approach, forecasted ozone levels are adjusted to exclude those grid cells dominated by water (i.e. more than 50 percent of the area within the grid cell is water) and that do not contain a monitoring site. The modeling analyses demonstrate that 2023 predicted ozone concentrations at all sites in Maine, including the Midcoast Maintenance Area, are well below the 84 ppb 1997 ozone NAAQS under all modeling scenarios. Table 4 provides a summary of EPA’s projected ozone design values in Maine.

Table 4

Projected Ozone Design Values (ppb) at Individual Monitoring Sites in Maine Based on the EPA’s Updated 2023 Transport Modeling

¹² *Air Quality Modeling Technical Support Document for the Updated 2023 Projected Ozone Design Values*, Office of Air Quality Planning and Standards, USEPA, June 2018.

Site	County	2009-2013 Avg ¹	2009-2013 Max ¹	2023en “3x3” Avg ³	2023en “3x3” Max ³	2023en”No Water” Avg ³	2023en”No Water” Max ³	2016-2018 ⁴
230010014	Androscoggin	61.0	62	49.4	50.2	49.3	50.1	59
230052003	Cumberland	69.3	70	56.2	56.8	56.7	57.3	65
230090102	Hancock	71.7	74	61.3	63.2	59.9	61.8	70
230090103	Hancock	66.3	69	55.0	57.3	55.3	57.5	63
230112005	Kennebec	62.7	64	50.5	51.5	50.5	51.5	62
230130004	Knox	67.7	69	54.7	55.7	54.8	55.8	63
230173001	Oxford	54.3	55	43.7	44.3	43.7	44.3	N/A
230194008	Penobscot	57.7	59	46.6	47.6	46.6	47.6	57
230230006	Sagadahoc	61.0	61	48.7	48.7	48.7	48.7	N/A
230310038	York	60.3	62	48.2	49.6	48.2	49.6	59
230310040	York	64.3	65	51.5	52.0	51.5	52.0	61
230312002	York	73.7	75	60.1	61.2	59.6	60.7	66

- 1) Base period 2009-2013 average and maximum design values based on 2009-2013 measured data.
- 2) Projected 2023 average and maximum design values based on the “3x3” approach recommended in EPA’s photochemical modeling guidance.
- 3) Projected 2023 average and maximum design values based on a modified “3x3” approach in which model predictions in grid cells without monitors that are primarily water are excluded from the projection calculations (“No Water”).
- 4) 2018 ozone design values based on 2016-2018 measured data (N/A indicates that a 2018 design value is not available).

6. Contingency Plan

The maintenance plan must include contingency provisions, as necessary, to promptly correct any NAAQS violation that occurs after redesignation of an area. It should include measures to be adopted, a schedule and procedures for adoption and implementation, and a specific time limit for action. Specific triggers that would put the plan into motion must also be identified. This plan is an enforceable part of the SIP and should ensure that the contingency measures are adopted explicitly once they are triggered.

Although it is highly unlikely that the Midcoast Ozone Maintenance Area will be unable to demonstrate continued compliance with the 1997 ozone NAAQS, Maine has listed possible contingency measures in the event of a future ozone air quality problem as required by section 175A of the CAA. At the end of each ozone season, the Department will evaluate whether the design value for the Midcoast ozone Maintenance Area is above or below the 8-hour ozone standard. If the design value is above the standard, the Department will evaluate the potential causes of this design value increase. The Department will examine whether this increase is due to an increase in local in-state emissions or an increase in upwind out-of-state emissions. If an increase in in-state emissions is determined to be a contributing factor to the design value increase, Maine will evaluate the projected in-state emissions for the ozone season in the following year. If in-state emissions are not expected to satisfactorily decrease in the following ozone season in order to mitigate the violation, Maine will implement one or more of the contingency measures listed in this section or substitute new VOC or NO_x control measures to achieve additional in-state emissions reductions. The contingency measures(s) will be selected by the Governor or the Governor’s designee within six months of the end of the ozone season for which contingency measures have been determined necessary. Possible contingency measures include the following:

Asphalt Paving

Reduce the VOC content limit for cutback asphalt from 5% to 4%, and lower current VOC content limits for emulsified asphalt by 20%.

Motor Vehicle and Mobile Equipment Non- Assembly Line Coating Operations

Adopt and implement the Ozone Transport Commission 2011 Model Rule for Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations.

Consumer Products

Adopt and implement the Ozone Transport Commission 2012 Model Rule for Consumer Products.

Architectural and Industrial Maintenance Coatings

Adopt and implement the 2014 OTC Model Rule for Architectural Coatings.

Rule Effectiveness Improvement

Increase enforcement of existing rules to increase rule effectiveness.

7. Transportation Conformity

Transportation conformity is required by section 176(c) of the CAA. Conformity to a SIP means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS (CAA 176(c)(1)(B)). EPA's conformity rule at 40 CFR part 93 requires that transportation plans, programs and projects conform to SIPs and establish the criteria and procedures for determining whether they conform. The conformity rule generally requires a demonstration that emissions from the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP) are consistent with the motor vehicle emissions budget (MVEB) contained in the control strategy SIP revision or maintenance plan (40 CFR 93.101, 93.118, and 93.124). A MVEB is defined as "that portion of the total allowable emissions defined in the submitted or approved control strategy implementation plan revision or maintenance plan for a certain date for the purpose of meeting reasonable further progress milestones or demonstrating attainment or maintenance of the NAAQS, for any criteria pollutant or its precursors, allocated to highway and transit vehicle use and emissions (40 CFR 93.101).

Under the conformity rule, limited maintenance plan areas may demonstrate conformity without a regional emission analysis (40 CFR 93.109(e)). All actions that would require transportation conformity determinations for the Midcoast Ozone Maintenance Area under EPA's transportation conformity rule provisions are considered to have already satisfied the regional emissions analysis and "budget test" requirements in 40 CFR 93.

However, because limited maintenance plan areas are still maintenance areas, certain aspects of transportation conformity determinations still will be required for transportation plans, programs and projects. Specifically, for such determinations, RTPs, TIPs and transportation projects still will have to demonstrate that they are fiscally constrained (40 CFR 93.108), meet the criteria for consultation (40 CFR 93.105) and Transportation Control Measure (TCM) implementation in the conformity rule provisions (40 CFR 93.112 and 40 CFR 93.113, respectively). Additionally, conformity determinations for RTPs and TIPs must be determined no less frequently than every four years, and conformity of plan and TIP amendments and transportation projects is demonstrated in accordance with the timing requirements specified in 40 CFR 93.104. In addition, for projects to be approved they must come from a currently conforming RTP and TIP (40 CFR 93.114 and 93.115).

Appendix A

Monitored Data

This appendix presents the 8-hour ozone 4th high values and design values from monitored ozone data and calculations for all sites in the Midcoast Ozone Maintenance Area.

All data and calculations meet the criteria for data handling contained in 40 CFR Part 50. Design values are calculated by taking the average of 3 consecutive years' 4th high values (which meet the data handling conventions cited above). The year cited for the design value is the final year of the 3-year average.

Table A-1 contains the 4th high value for each year in the Midcoast Ozone Maintenance Area since 1977, while Table A-2 contains the design value for each 3-year average. The data clearly demonstrates that ozone concentration in this maintenance area have continued to decline since its 2006 redesignation.

Table A-1

4th High Values (ppm) for Each Site in the Midcoast Ozone Maintenance Area

Midcoast, ME AREA	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th
Site Name	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Port Clyde						0.116	0.122	0.101	0.092	0.113	0.093	0.086	0.085
Cadillac Mt Summit													
McFarland Hill-0103													
Ilse Au Haut						0.109	0.120	0.088	0.087	0.115	0.086	0.081	0.081
McFarland Hill-0101								0.076	0.089	0.095		0.080	0.075
McFarland Hill-HDQR		0.091	0.089	0.084	0.083	0.094	0.114						
Seawall													
Schoodic Point													
Deer Isle	0.087	0.098											
Westport Island			0.094	0.098									
1997 NAAQS	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084				
MAXIMUM 4th High	0.87	0.098	0.094	0.098	0.083	0.109	0.122	0.096	0.099	0.115	0.093	0.086	0.085

Site Name	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th
	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Port Clyde	.090	0.081	0.090	0.077	0.081	0.070	0.091	0.088	0.082	0.074	0.075	0.072	0.082
Cadillac Mt Summit		0.082	0.085	0.094	0.090	0.078	0.101	0.100	0.083	0.082	0.083	0.080	0.086
McFarland Hill-0103				0.088	0.092	0.070	0.094	0.089	0.080	0.073	0.071	0.070	0.083
Isle Au Haut													
McFarland Hill-0101	0.092	0.073	0.077										
McFarland Hill-HDQR													
Seawall						0.062	0.085						
Schoodic Point									0.077	0.070			
Deer Isle													

Westport Island													
1997 NAAQS	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084
MAXIMUM 4th High	0.092	0.082	0.090	0.094	0.092	0.078	0.101	0.100	0.083	0.082	0.083	0.080	0.086
	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th	4th
Site Name	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Port Clyde	0.061	0.069	0.070	0.068	0.062	0.076	0.062	0.067	0.063	0.062	0.064		
Cadillac Mt Summit	0.074	0.074	0.076	0.074	0.066	0.068	0.065	0.070	0.066	0.080	0.064		
McFarland Hill-0103	0.064	0.073	0.070	0.066	0.060	0.069	0.062	.065	0.060	0.067	0.064		
Isle Au Haut													
McFarland Hill-0101													
McFarland Hill-HDQR													
Seawall													
Schoodic Point													
Deer Isle													
Westport Island													
1997 NAAQS	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084
MAXIMUM 4th High	0.074	0.074	0.076	0.074	0.066	0.076	0.065	0.070	0.066	0.080	0.064		

Table A-2

Design Values (ppm) for Each Site in the Midcoast Ozone Maintenance Area

Site	1983-85	1984-86	1985-87	1986-88	1987-89	1988-90	1989-91	1990-92	1991-93	1992-94	1993-95	1994-96	1995-97	1996-98
Port Clyde					0.108	0.105	0.102	0.101	0.097	0.088	0.087	0.085	0.087	0.082
Cadillac Mt Summit														0.087
McFarland Hill-0103														
Isle Au Haut				0.103	0.105	0.098	0.096	0.094	0.082					
McFarland Hill-0101							0.086	0.088	0.085		0.082	0.080	0.080	
McFarland Hill HDQR	0.088	0.086	0.087	0.097										
Seawall														
Schoodic Point														
Deer Isle														
Westport Island														
1997 NAAQS	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084
MAXIMUM DV	0.088	0.086	0.087	0.103	0.108	0.105	0.102	0.101	0.097	0.088	0.087	0.085	0.087	0.087

Site	1997-99	1998-00	1999-01	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11	2010-12
Port Clyde	0.082	0.076	0.080	0.083	0.087	0.081	0.077	0.073	0.076	0.071	0.070	0.066	0.066	0.066
Cadillac Mt Summit	0.089	0.087	0.089	0.093	0.094	0.088	0.082	0.081	0.083	0.080	0.078	0.074	0.072	0.066
McFarland Hill-0103		0.083	0.085	0.084	0.087	0.080	0.074	0.071	0.074	0.072	0.073	0.069	0.065	0.063
Isle Au Haut														
McFarland Hill-0101														
McFarland Hill HDQR														
Seawall														

Schoodic Point
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 Westport Island
1997 NAAQS
MAXIMUM DV

											0.079	0.070	0.067
													0.059
	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084
	0.089	0.087	0.089	0.093	0.096	0.094	0.082	0.081	0.083	0.080	0.078	0.074	0.072

Site
 Port Clyde
 Cadillac Mt Summit
 McFarland Hill-0103
 Isle Au Haut
 McFarland Hill-0101
 McFarland Hill HDQR
 Seawall
 Schoodic Point
 Deer Isle
 Westport Island
1997 NAAQS
MAXIMUM DV

	2011-13	2012-14	2013-15	2014-16	2015-17	2016-18
Port Clyde	0.068	0.066	0.068	0.064	0.064	0.063
Cadillac Mt Summit	0.069	0.066	0.067	0.067	0.072	0.070
McFarland Hill-0103	0.065	0.063	0.065	0.062	0.064	0.063
Isle Au Haut						
McFarland Hill-0101						
McFarland Hill HDQR						
Seawall						
Schoodic Point						
Deer Isle						
Westport Island						
	0.084	0.084	0.084	0.084	0.084	0.084
	0.069	0.066	0.068	0.067	0.072	0.070

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