

# METROPOLITAN WASHINGTON AIR QUALITY COMMITTEE 777 North Capitol Street, N.E., Suite 300 Washington, D.C. 20002

# Air Quality Planning Work Program and Budget

Fiscal Year 2022 (July 1, 2021 through June 30, 2022) Adopted May xx, 2021

Prepared by

Metropolitan Washington Council of Governments Department of Environmental Programs Air Quality Section

# I. Background

This document presents the work program for the Metropolitan Washington Air Quality Committee (MWAQC) to be carried out for Fiscal Year 2022 (July 1, 2021 and June 30, 2022). It describes the work to be carried out by the staff of the Metropolitan Washington Council of Governments (COG) that is directly funded in this work program, as well as the in-kind contributions of the state air quality management agencies from the District of Columbia, Maryland, and Virginia. The tasks outlined in this work program are designed to ensure a regional approach to meeting the federal health standards in the Washington metropolitan region. Through the activities described for the coming year, several important steps will be taken towards improving the air quality of the region and meeting the deadlines required by the Clean Air Act.

# Certification of the Metropolitan Washington Air Quality Committee

The authority of MWAQC is derived from the certifications made by the Governors of Maryland and Virginia and the Mayor of the District of Columbia pursuant to Title I, "Provisions for Attainment and Maintenance of National Ambient Air Quality Standards," of the Clean Air Act Amendments of 1990 (section 174, 42 U.S. Code 7504).

## Mission of Metropolitan Washington Air Quality Committee

The primary responsibilities of MWAQC are development of regional carbon monoxide (CO), ozone, and fine particulate ( $PM_{2.5}$ ) National Ambient Air Quality Standards (NAAQS) plans for meeting the federal health standards for the criteria pollutants for which the Washington, DC-MD-VA region has been designated nonattainment. The air quality plans developed by MWAQC are provided to the States for incorporation in the State Implementation Plan (SIP) for submittal to the U.S. Environmental Protection Agency (EPA).

Pollutant	Attainment	Nonattainment
Ozone (O <sub>3</sub> )		
2015 Standard		
2008 Standard		
Fine Particles (PM <sub>2.5</sub> )		
Carbon Monoxide (CO)		
Sulfur Dioxide (SO <sub>2</sub> )		
Nitrogen Dioxide (NO <sub>2</sub> )		

# Air Quality Classifications of the Washington Metropolitan Region

## Membership on MWAQC

Membership on MWAQC consists of representatives from twenty-two member local governments within the non-attainment area, as well as the Directors or their designees from the state air quality management agencies and state transportation agencies, representatives of state legislatures, and the Chair of the National Capital Region Transportation Planning Board (TPB). MWAQC's bylaws allow for the expansion or contraction of MWAQC membership, depending on the geographic scope of the designated nonattainment area.

## **Organizational Structure of MWAQC**

MWAQC adopted by-laws which established a position of Chair and three Vice-Chairs, and it has several standing subcommittees or special supporting committees including an Executive Committee, a Technical Advisory Committee, and a Public Advisory Committee. The Technical Advisory Committee has several standing subcommittees: Conformity, Attainment Modeling, Emissions Inventory, and Local Government Initiatives Subcommittee.

## Interstate Air Quality Council

The Interstate Air Quality Council (IAQC) is a cabinet-level collaboration between the District of Columbia, the State of Maryland and the Commonwealth of Virginia. It is comprised of the secretaries of the environment and transportation. IAQC resolves difficult issues if needed to ensure the mutual goals of improved air quality and efficient transportation are met.

## Staff Support to MWAQC

The lead role for administrative and technical support to MWAQC is held by the staff of the Metropolitan Washington Council of Governments. Major additional complementary technical staff support is provided by the staffs of the state air quality management agencies. During 1996, MWAQC established a Technical Advisory Committee (TAC) which formally broadened its staff support to include local government technical staff as well as staff representing the state transportation agencies.

# II. FY 2022 MWAQC Work Program Objectives

The Washington metropolitan region is currently designated as a marginal nonattainment area for the 2015 ozone NAAQS. As of the end of the 2020 ozone season, the area remains out of compliance with the standard and cannot come into attainment by the statutory deadline for marginal areas by August 3, 2021. As a result, the Air Directors of the District of Columbia, Maryland, and Virginia are in consultation with the respective transportation departments to potentially submit a letter for a voluntary nonattainment area classification bump-up request to EPA in May 2021. The letter will request that EPA only approve the voluntary bump-up if the data shows the area remains in nonattainment at the end of the 2021 ozone season based on preliminary data. A bump-up in the nonattainment classification, from marginal to moderate, will require the region to develop a Reasonable Further Progress (RFP) and an attainment SIP, to be submitted to the EPA in early 2023. Developing a 2015 Ozone NAAQS attainment SIP will be one of the main priorities in the FY 2022 work program.

As part of the staff's work tracking the air quality data for the 2021 ozone season, a review of the data will be undertaken in the September/October timeframe to determine if the area would be able to show attainment of the 2015 ozone standard and report to MWAQC. Based on the findings of this review, the states and MWAQC will either continue with the planned work to develop an attainment SIP, if data shows the region has not met the standard, or will transition to developing a redesignation request along with a maintenance plan, if the data supports this action.

During the same planning timeframe, the Virginia Department of Environmental Quality (DEQ), with the support of the District, Maryland, and MWAQC staff, will develop a redesignation request and maintenance plan for the 1-hour ozone standard which is needed to move

forward with Virginia's NNSR certification requirements for the 2015 ozone standard. The specifics (including content and schedule) of the 1-hour ozone NAAQS maintenance plan are currently being discussed by Virginia DEQ staff and the EPA. Additional description of this work activity and associated fiscal budget information will be appended to the work program once finalized.

MWAQC FY 2022 work program objectives include:

- Develop a SIP for the 2015 ozone standard.
- Track air monitor data to determine area's designation status for the 2015 ozone NAAQS.
- Assist in the development of a redesignation request and a maintenance plan for the 1-hour ozone NAAQS.
- Work with local members to identify and implement initiatives to reduce air pollution.
- Review and comment on transportation conformity assessments for ozone.
- Communicate to regional leaders and the public on the need for actions to reduce emissions and improve air quality.

## Role of COG/MWAQC Staff

The lead role for administrative and technical support to MWAQC is held by COG/MWAQC staff. Close collaboration between MWAQC staff and the state air agencies will be necessary to review and revise inventories as needed for ozone, potential control measures, and calculation of necessary reductions needed to meet the standards. MWAQC staff will hold monthly calls with the state air agencies to coordinate work tasks and use of resources. As in the past, MWAQC staff will work closely with COG's Department of Transportation Planning (DTP) staff on mobile emissions inventory and conformity issues.

This document is intended to guide the activities of MWAQC through the twelve-month period from July 1, 2021 to June 30, 2022. In subsequent sections the reader will find detailed descriptions of the six major work program areas that are included in this work program. The core work areas are as follows:

- 1. Emissions Inventory Development
- 2. Regional Control Measures
- 3. Transportation Conformity/Mobile Emissions Analysis
- 4. Public Participation
- 5. MWAQC Support
- 6. Program Management

Costs for each of the above tasks are also included along with more detailed descriptions in Section III of this document.

The states and COG staff will meet periodically to discuss the work program status once contracts have been executed. COG will report quarterly on expenses. With the consent of the Chair of MWAQC and/or the Executive Committee, in consultation with the states and concurrence of the funding agencies, specific subtasks may be delayed, new tasks or

subtasks added or substituted, or existing tasks or subtasks modified in scope. These actions will take place only as long as EPA deadlines as interpreted by MWAQC are achieved.

# III. FY 2022 Work Program Task Descriptions

Following is a detailed description of the six major work program areas.

#### 1. Emissions Inventory Development (\$47,170)

In 2018, EPA designated the region as marginal nonattainment for the 2015 ozone standard. Data shows that the region did not meet the standard by the required deadline. In FY 2022, staff will work on the development of inventories for an attainment State Implementation Plan (SIP) for the 2015 ozone standard.

MWAQC staff will develop the necessary inventories to be submitted as part of the SIP. Staff will coordinate with state air agencies, EPA, the Ozone Transport Commission (OTC), and the Mid-Atlantic Regional Air Management Association (MARAMA) regarding the selection of a base year, Reasonable Further Progress (RFP) year, and the attainment year for the plan. (Potential inventories years are 2017 base year, 2023 RFP, and 2023 attainment year.)

Staff will coordinate with and assist the state air agencies and TPB staff to determine the necessary data for on-road modeling inputs and review on-road model inputs and emissions inventories for various milestone years. Staff will coordinate with TPB staff to develop new Motor Vehicle Emissions Budgets (MVEB's) for the SIP. The addition of buffers to the mobile source budgets under the 2015 ozone standard attainment or maintenance plan scenarios will be provided, as available and as allowed, for each scenario.

Staff will coordinate with the state air agencies to receive milestone year point source inventories and develop base year and projected nonpoint, on-road, and nonroad source inventories.

Staff will participate in OTC and MARAMA meetings to support inventory development and keep track of various Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) control measures being adopted by states to reduce ozone. Identification of control measures and voluntary actions will help in attaining the ozone NAAQS.

Attainment modeling is conducted by Regional Planning Organizations such as the OTC. Staff will participate in and track larger scale attainment modeling efforts at OTC and regional modeling centers in OTC states. Staff will participate in quarterly modeling research meetings/webinars held by the University of Maryland and the Maryland Department of Environment (MDE) staff. Staff at the Virginia Department of Environmental Quality (VDEQ) is also actively participating in the OTC modeling effort and will provide critical information on emissions reduction needed locally in the Washington region to attain the 2015 ozone standard. COG staff will present informational briefings on the results of modeling exercises to TAC and MWAQC.

#### **Deliverables:**

- a) Development of inventory/SIP
- b) Meetings of UMD/MDE Modeling

Deadline: Ongoing Quarterly c) Attend Emissions Inventory Trainings and Conferences

#### 2. Regional Control Measures (\$122,527)

As directed from MWAQC, staff will provide assistance to develop and implement recommended actions to meet the ozone standard and work towards no unhealthy air days. Actions will be cost-effective, viable, implementable and include co-benefits for criteria pollutants. Staff will facilitate further discussions among MWAQC member agencies and COG committees, such as Region Forward, CEEPC, and TPB Technical Committee on the findings and potential implementation actions included in the recommendations of the What We Can Do report and Regional Action Plan. Efforts will involve the development of necessary elements of a comprehensive control strategy for use in the 2015 ozone NAAQS SIP and planning and implementation support for local government actions to improve air quality.

Staff will provide support for the planning and development process related to the 2015 ozone standard including providing a forum for coordinating policies and measures among state air and energy agencies and local jurisdictions to improve the region's air.

Development of Control Strategies:

Control strategy options will be developed and include identification, review and analysis of existing and new measures for potential inclusion in planning support documents, including:

- Master list of control measures
- Priority list of control measures
- Reasonably Available Control Measures Analysis (RACM)
- Criteria for screening, prioritization and possible RACM evaluation
- Control and Contingency Measures section for SIP/MP
- Voluntary Bundle section for SIP
- Weight of Evidence section of SIP
- Local government commitment letters

Staff will focus on federal, state, and local measures and will evaluate the extent to which measures are strong candidates for inclusion in planning documents based on a set of analysis metrics and criteria to be developed using past approaches and SIP best practices and requirements. Measures development and evaluation will be conducted in close collaboration with the MWAQC TAC and state and local agency staff. Presentations will also be developed for ACPAC and MWAQC. Local actions development work will be coordinated with the Built Environment and Energy Advisory Committee (BEEAC) and Climate, Energy and Environment Policy Committee's (CEEPC) as well.

## Support for Local Government Actions to Improve Air Quality:

Local governments in the Washington region will continue to work on their commitments to reduce emissions. MWAQC staff will assist local members to develop and implement programs to reduce ozone precursors by highlighting and prioritizing voluntary measures in the What We Can Do report and Regional Action Plan. Local measures may include energy efficiency, renewable energy, low emission vehicles, high performance buildings, transportation demand management, low impact development, urban heat island reduction, and tree canopy

management. Staff will identify priority measures and provide technical expertise, in cooperation with the states, to assist local governments in the development of strategies and programs to reduce emissions of ozone precursors and co-benefits for  $PM_{2.5}$  and greenhouse gases and to provide a methodology for calculating and reporting evidence of actions taken.

COG will continue to work with members and partners to support an electric vehicle infrastructure network and increase awareness of electric mobility. Staff will participate on the Northeast Corridor Regional Strategy Steering Committee to develop a regionwide EV charging infrastructure and coordinate with local members on implementation.

Staff will participate with groups such as CEEPC, BEEAC, Regional Tree Canopy Subcommittee, the Electric Vehicle Workgroup, Greater Washington Regional Clean Cities (GWRCCC), and similar efforts that will help reduce emissions.

Staff will stay abreast of OTC/MARAMA ozone precursor pollutant inventory development and photochemical modeling. Staff will provide support for the planning process related to the 2015 ozone standard.

Staff will track federal statutory and judicial regulatory actions that affect air quality in the Washington region and work with MWAQC to take appropriate policy actions. Staff will provide information and a forum for coordinating public policies that affect air quality among the state air and energy agencies and local governments in the region.

Deliverables:	Deadline:
a) Identify, evaluate, measure, document measures	Ongoing
to reduce ozone precursors and identify potential	
co-benefits	
b) Identify opportunities to expand local control measures	Ongoing
c) Track implementation of state and local control measures	Ongoing
d) Track/report on State and federal Legislative Activity	As needed
e) Updates to What We Can Do	As Needed
f) Regional Workgroups	As Scheduled

## 3. Transportation Conformity/Mobile Emissions Analysis (\$181,227)

During FY 2022, staff will support any conformity analysis conducted by TPB staff. MWAQC staff will review and comment on any conformity analysis undertaken in support of the Visualize 2045 transportation plan and TIP. If necessary, MWAQC staff will present the results of the conformity analysis to MWAQC and facilitate development of a comment letter.

Staff will coordinate planning the air quality SIP schedule and tasks with TPB staff. MWAQC staff will coordinate with TPB staff to develop mobile emissions inventories needed for the 2015 ozone standard SIP. The addition of buffers to the mobile source budgets under the 2015 ozone standard attainment or maintenance plan scenarios will be provided, as available and as allowed, for each scenario.

The Conformity Subcommittee may choose to review regional transportation conformity work and participate in the TPB interagency consultation process. Upon request by the TPB and the TPB Technical Committee, staff may provide briefings on EPA rulings, air quality standards, and guidance as they apply to conformity in the Washington region.

In addition to the above work activities, MWAQC staff will assist TPB with inputs as well as technical work supporting state environmental planning activities. MWAQC staff will work closely with state air and transportation agencies and COG TPB staff to revisit and potentially refresh inputs for the MOVES model, including any activities related to the vehicle registration/vehicle identification number (VIN) data).

#### **Deliverables:**

- a) Comment on Transportation Conformity Analysis
- b) Provide Briefings and Written Reports to TPB and TPB Technical Committee
- c) Review analysis input, output, and acquire and q/a data

Deadline: TPB deadline Ongoing

Ongoing

#### 4. Public Participation (\$55,568)

## Task 1: ACPAC

Staff will support the Air and Climate Public Advisory Committee (ACPAC), an advisory committee to MWAQC and to the Climate, Energy and Environment Policy Committee (CEEPC), by attending meetings, providing program support, and briefing the committee on federal regulations, air quality progress, air quality planning issues, local member initiatives, and proposed actions of MWAQC. ACPAC will meet six times in 2022 - 2021. The ACPAC Chair will participate in MWAQC meetings to report on the Committee's deliberations and recommendations as a regular part of MWAQC meetings.

#### Task 2: Air Quality Reporting and Outreach

MWAQC leadership, COG/MWAQC Air Quality staff and COG Public Affairs staff will meet with the media, particularly environmental reporters and editorial boards, to inform them about air quality issues and progress. Staff will make periodic reports about the air quality challenges associated with the NAAQS, current emissions and related air quality trends to the COG Board of Directors, Chief Administrative Officers' Committee and to member local governments as requested. The goal is to inform decision-makers about air quality issues and challenges. This task also covers COG staff time to respond to media inquiries or support the MWAQC leadership in responding to media inquiries.

Public outreach will be conducted to promote the region's air quality improvements, challenges of meeting the air quality standards, and to promote local member initiatives. Existing materials will be updated and new materials will be developed such as, press releases, chair talking points, guest blogs, and the air quality dashboard.

#### **Deliverables:**

a) ACPAC MeetingsAsb) ACPAC Member RecruitmentDecc) Response to Media InquiriesOn;d) Develop Materials (Press Releases, Articles, Blogs)As

Deadline: As scheduled (6)

December 2021 Ongoing As needed

#### 5. MWAQC Support (\$102,155)

MWAQC Support includes staff support for MWAQC meetings, MWAQC Executive Committee, TAC, State Air Coordination, and subcommittee meetings and calls. Staff will coordinate and participate in all meetings, including preparing agendas, minutes, presentations and materials, and securing speakers. MWAQC will hold four regular business meetings to discuss planning, local measures, regulations, guidance and legislation about air quality issues affecting the Washington region and whether or not to comment or act on proposed plans. Staff will coordinate with the chair and vice chairs, responding to requests, and develop materials for new members.

The TAC will meet eight times or as needed, with frequent subcommittee meetings. Staff will recruit stakeholders to participate on TAC. The Executive Committee will meet five times during the year. Staff will hold monthly calls with the state air agencies to coordinate use of resources and attainment progress. The Local Government Initiatives Subcommittee will meet as needed to help identify and implement priority/voluntary measures.

#### **Deliverables:**

- a) MWAQC Meetings
- b) MWAQC Executive Ctte Calls
- c) Technical Advisory Ctte Calls
- d) TAC Stakeholder Recruitment
- e) State Air Agency Coordination Calls
- f) Subcommittee calls (local government initiatives, emissions inventory, conformity)

#### Deadline:

As scheduled (4) As scheduled (5) As scheduled (8) January 2022 Monthly (11, no August call) As Scheduled

## 6. Project Management (\$35,033)

Staff will prepare a draft work program and budget for the fiscal year 2023. Staff will work with the MWAQC Budget Subcommittee and MWAQC to get an approved budget in the spring before the fiscal year begins. Staff will work with funding agencies to finalize grants and contracts and invoice as required. Staff will provide quarterly financial and status reports to track the progress of implementing the approved work program and budget.

Staff uses information technology extensively in performing analyses, completing written summaries, downloading information and data from EPA, and the Internet for a variety of research needs. Contribution to computer support for project staff and management systems is accounted for in this task. Efforts to provide materials on the COG website may also fall under this task.

#### **Deliverables:**

- a) Quarterly Expense and Progress Reports
- b) MWAQC Budget Committee
- c) Draft MWAQC FY2023 Work Program and Budget
- d) Adopt MWAQC FY2023 Work Program and Budget

Deadline: Quarterly As scheduled November 2021

March 2022

# **IV.** Funding Sources and Projected Budget

The MWAQC Work Program for FY 2022 is a 12-month work program and budget for the period from July 1, 2021 to June 30, 2022.

The MWAQC bylaws adopted in October 2004 include a funding formula that allocates contributions to the MWAQC budget by thirds, 1/3 from state air agencies, 1/3 from state transportation agencies, and 1/3 from local governments (Table 1). The budget for the core work program is a total of \$543,680. The state air agencies, the state and local departments of transportation and the Transportation Planning Board, and the Council of Governments will each contribute \$181,227. The funding by task is shown in Table 2. The MWAQC bylaws also state that "nothing shall preclude additional sub-regional efforts to be added to the work program at the request and expense of individual state agencies and local governments."

Note that the funding from the TPB to support air quality planning and conformity is contingent upon TPB's approval of the Unified Planning Work Program (UPWP) for FY 2022. Contributions from the State Air Agencies are contingent on approval of their organization's funding. If needed, the MWAQC Work Program will be revised in October should the final budget amount change.

Source	ApprovedFY 2021	Requested FY 2022	Change	Requested FY2022 Payments
COG member jurisdictions	\$174,539	\$181,227	+\$6,688	\$181,227
State DOT/TPB	\$174,539	\$181,227	+\$6,688	\$181,227
State Air Agencies				
DOEE	\$22,103	\$22,649	+\$546**	\$22,103
MDE*	\$76,738	\$79,676	+\$2,937**	\$76,738
VDEQ	\$75,698	\$78,902	+\$3,204**	\$75,698
States. Subtotal	\$174,539	\$181,227	+\$6,688**	\$174,539
TOTAL	\$523,617	\$543,680	+20,063 (3.7%)	

Т	able 1		
FY 2022 MWAQC F	<sup>:</sup> unding Co	ontributions b	by Source

\*Funded by the Maryland Department of Transportation

\*\*FY2022 increase for state air agencies (\$6,688) will be paid from reserve.

# Table 2FY 2022 Air Quality Core Work Program Tasks<br/>(Breakdown of Costs by Type)

Work Program Tasks	COG staff (\$)	Consultants (\$)	Direct (\$)	Total Cost (\$)
1. Emissions Inventory Development	\$45,170		\$2,000	\$47,170
2. Regional Control Measures	\$119,027		\$3,500	\$122,527
3. Transportation Conformity/Mobile Emissions Analysis	\$181,227		\$0	\$181,227
4. Public Participation	\$47,568		\$8,000	\$55,568
5. MWAQC Support	\$89,655		\$12,500	\$102,155
6. Project Management	\$32,631		\$2,402	\$35,033
TOTAL	\$515,278	\$0	\$28,402	\$543,680