Metropolitan Washington
Council of Governments

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

# Air Quality Planning
# Work Program and Budget

## July 1, 2020 through June 30, 2021
Adopted May xx, 2020

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 between July 1, 2020 and June 30, 2021. 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 EPA.

## Air Quality Classifications of the Washington Metropolitan Region

| Pollutant | Attainment | Nonattainment |
|---|---|---|
| Ozone ($O_3$) | | |
| 2015 Standard | | ● |
| 2008 Standard | ● | |
| Fine Particles ($PM_{2.5}$) | ● | |
| Carbon Monoxide (CO) | ● | |
| Sulfur Dioxide ($SO_2$) | ● | |
| Nitrogen Dioxide ($NO_2$) | ● | |

## 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 2021 MWAQC Work Program Objectives

MWAQC and the states will track designation and lay the ground work to meet the 2015 ozone standard. Support will be provided to local members to develop and implement air quality initiatives to help meet the ozone standard.

In FY 2021, MWAQC Work Program objectives are:

- Track designation and data for the 2015 ozone NAAQS.
- Prepare ground work to develop a State Implementation Plan (SIP) for the 2015 ozone standard. (This is needed in the event the Washington region does not meet the ozone NAAQS by 2021.)
- 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.
- Develop and publish updated Trends report.

### 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 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, 2020 to June 30, 2021. 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 would only take place as long as EPA deadlines as interpreted by MWAQC are achieved.

## III. FY 2021 Work Program Task Descriptions

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

### 1. Emissions Inventory Development ($48,932)

In 2018, EPA designated the region as marginal nonattainment for the 2015 ozone standard. In FY 2021, staff will prepare for the development of inventories for a Redesignation Request and Maintenance Plan (RRMP) or an attainment State Implementation Plan (SIP) for the 2015 ozone standard – depending on the attainment status of the Washington region. The following outlines the necessary tasks for possible attainment/nonattainment scenarios. The final direction will be determined by data through the 2020 ozone season and directed by MWAQC membership.

Scenario 1:
If the region attains the standard and agrees to submit a RRMP, staff will coordinate with state air agencies, TPB, and EPA regarding the selection of a base year, intermediate year, and the maintenance year for that plan. Staff will also initiate the development of inventories for those milestone years and start working on the required documents.

Scenario 2:
If the region does not attain the standard and the regional fourth highest daily 8-hour maximum concentration is above 70 ppb, the region may be redesignated to moderate nonattainment area. In this case, the region will need to develop an attainment plan a year after the redesignation. Given the short time-frame to develop an extensive plan, MWAQC will start the process of developing the plan. Staff will coordinate with state air agencies, EPA, and OTC/MARAMA regarding the selection of a base year, Reasonable Further Progress (RFP)

year, and the attainment year for the moderate area attainment plan. Staff will also initiate the development of inventories for those milestone years and coordinate with OTC/MARAMA.

Scenario 3:
If the region does not attain and the regional fourth highest daily 8-hour maximum concentration is 70 ppb or less, the region will be eligible for a 1-year extension of the attainment deadline. Even in this scenario, MWAQC will need to prepare for the likelihood of continued nonattainment after the extension and consequently the submittal of an attainment SIP. In this case, staff will coordinate with state air agencies to develop a template letter for requesting to EPA for an extension and then undertake the necessary coordination effort and initiate the inventory development work for the attainment SIP.

Depending on final ozone season data, staff will coordinate with the state air agencies, MWAQC members, and TPB staff to determine and respond to other potential scenarios not listed above.

Staff will coordinate with and assist the state air agency and TPB staff to determine the necessary data for onroad modeling inputs and review onroad model inputs and emissions inventories for various milestone years. 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 also track the attainment status of the 2015 ozone standard and report to MWAQC, TAC, and other regional groups as needed.

Staff will participate in Ozone Transport Commission (OTC) and Mid-Atlantic Region Air Management Association (MARAMA) to support inventory development and keep track of various VOC and $NO_x$ 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 MDE staff. VADEQ 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: | Deadline: |
|---|---|
| a) Prepare for development of inventory/SIP | Ongoing |
| b) Meetings of UMD/MDE Modeling (RAAMP) | Quarterly |
| c) Attend Emissions Inventory Trainings and Conferences | As needed |

## 2. Regional Control Measures ($100,451)

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 potential use in either a SIP or a RRMP (depending on the region's attainment status for the 2015 ozone standard) and planning and implementation support for local government actions to improve air quality.

Staff will provide support for the planning 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) (if needed)
- Criteria for screening, prioritization and possible RACM evaluation
- Control Measures section for SIP/MP
- Voluntary Bundle section for SIP/MP
- 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) committees as well.

<u>Support for Local Government Actions to Improve Air Quality:</u>
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 to 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 the Climate, Energy and Environment Policy Committee's (CEEPC), Built Energy and Environment Committee (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 affects 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 to reduce ozone precursors and identify potential co-benefits | Ongoing |
| 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 ($174,539)

During FY 2021, staff will support any conformity analysis conducted by TPB staff. MWAQC staff will review and comment on any conformity analysis undertaken in support of a potential amendment to the Visualize 2045 transportation plan or TIP. If necessary, MWAQC staff will present the results of the conformity analysis to MWAQC and facilitate development of a comment letter.

MWAQC staff will coordinate with TPB staff to prepare the ground work to develop mobile emissions inventory that may be needed for the 2015 ozone standard SIP. Staff will coordinate planning the air quality SIP schedule with TPB staff.

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.

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

## 4. Public Participation ($53,701)

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 2020 - 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: | Deadline: |
|---|---|
| a) ACPAC Meetings | As scheduled (6) |
| b) ACPAC Member Recruitment | December 2019 |
| c) Response to Media Inquiries | Ongoing |
| d) Develop Materials (Press Releases, Articles, Blogs) | As needed |

## 5. MWAQC Support ($103,312)

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 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 (What We Can Do) Subcommittee will meet as needed to help identify and implement priority measures.

| Deliverables: | Deadline: |
|---|---|
| a) MWAQC Meetings | As scheduled (4) |
| b) MWAQC Executive Ctte Calls | As scheduled (5) |
| c) Technical Advisory Ctte Calls | As scheduled (8) |
| d) TAC Stakeholder Recruitment | January 2021 |
| e) State Air Agency Coordination Calls | Monthly (11, no August call) |
| f) Subcommittee calls (local government initiatives, emissions inventory, conformity) | As Scheduled |

## 6. Project Management ($42,682)

Staff will prepare a draft work program and budget for the fiscal year 2022. 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: | Deadline: |
|---|---|
| a) Quarterly Expense and Progress Reports | Quarterly |
| b) MWAQC Budget Committee | As scheduled |
| c) Draft MWAQC FY2022 Work Program and Budget | March 2021 |
| d) Adopt MWAQC FY2022 Work Program and Budget | May 2021 |

## IV. Funding Sources and Projected Budget

The MWAQC Work Program for FY 2021 is a 12-month work program and budget for the period from July 1, 2020 to June 30, 2021.

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 $523,617. The state air agencies, the state and local departments of transportation and the Transportation Planning Board, and the Council of Governments will each contribute $174,539. 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 2021. 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.

**Table 1**
FY 2021 MWAQC Funding Contributions by Source

| Source | Approved FY 2020 | Requested FY 2021 | Change |
|---|---|---|---|
| COG member jurisdictions | $174,539 | $174,539 | |
| State DOT/TPB | $174,539 | $174,539 | |
| State Air Agencies | | | |
| DOEE | $22,268 | $22,103 | -$165 |
| MDE* | $76,918 | $76,738 | -$180 |
| VDEQ | $75,353 | $75,698 | +$345 |
| States. Subtotal | $174,539 | $174,539 | |
| TOTAL | $523,617 | $523,617 | 0 |

*Funded by the Maryland Department of Transportation

## Table 2
FY 2021 Air Quality Core Work Program Tasks
(Breakdown of Costs by Type)

| Work Program Tasks | COG staff ($) | Consultants($) | Direct ($) | Total Cost ($) |
|---|---|---|---|---|
| 1. Emissions Inventory Development | $47,432 | | $1,500 | $48,932 |
| 2. Regional Control Measures | $80,792 | $15,000 | $4,659 | $100,451 |
| 3. Transportation Conformity/Mobile Emissions Analysis | $174,539 | | $0 | $174,539 |
| 4. Public Participation | $45,701 | | $8,000 | $53,701 |
| 5. MWAQC Support | $91,812 | | $11,500 | $103,312 |
| 6. Project Management | $41,682 | | $1,000 | $42,682 |
| TOTAL | $481,958 | $15,000 | $26,659 | $523,617 |