

# **Delaware Particulate Matter (PM) Advance Program**

## **Year 2 Summary & Year 3 Plan**



### **Delaware Department of Natural Resources and Environmental Control**

#### **Division of Air Quality**

**March 6, 2018**

## Section 1 - Introduction

On July 30, 2013 the State of Delaware Department of Natural Resources and Environmental Control (DNREC), Division of Air Quality (DAQ), sent a letter to EPA requesting acceptance of Delaware in the PM Advance program. EPA responded with a letter to Delaware on August 13, 2013 accepting Kent and Sussex Counties into the Advance program, but not New Castle County, because at that time New Castle County was designated as nonattainment under the 1997 and 2006 PM<sub>2.5</sub> National Ambient Air Quality Standards (NAAQS).

On August 5, 2014, EPA finalized rulemaking that re-designated New Castle County as attaining the 1997 and 2006 PM<sub>2.5</sub> NAAQS, with an effective date of September 4, 2014.<sup>1</sup> Consequently, the DAQ received a letter from EPA on September 5, 2014 that included New Castle County, and thus *all* of Delaware, into the PM Advance program. Furthermore, EPA designated all of Delaware as attainment for the 2012 annual PM<sub>2.5</sub> NAAQS on December 18, 2014.

On September 2, 2015, DAQ submitted the Path Forward Plan to EPA Region 3, which provided the following:

- The motivations for Delaware’s participation in the PM Advance program,
- The status of ambient air quality in Delaware relative to the current daily and annual fine particulate NAAQS,
- The sources and magnitude of emissions of fine particulate matter and its precursors,
- Existing and on-going efforts that contribute to the reduction of PM emissions, and
- Projects planned for Year 1 of the program.

Delaware’s participation in the PM Advance program is expected for five years, with the option to renew or discontinue participation after five years. This report summarizes the projects and activities from the second year of the program and identifies projects and activities planned for the third year.

## Section 2 Year 2 Projects, Control Measures, and Activities

The following sections provide information on projects and measures initiated or completed in the second year of the PM Advance program. In addition, there were several projects initiated or completed in Year 2 that were not identified in the Path Forward Plan. The projects implemented in the second year are contributing to the reduction of primary PM<sub>2.5</sub> and its precursors, as well as reducing ozone precursors (New Castle County is nonattainment for the 2015 8-hr ozone standard).

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<sup>1</sup> 79 Federal Register 45350

## **2.1 PM Advance Webpage**

The Delaware PM Advance webpage went live in April 2017. The webpage includes information about the PM Advance Program, a copy of Delaware’s annual PM Advance Report, and basic information and links related to reduction of PM emissions. The Webpage is located at <http://www.dnrec.delaware.gov/Air/Pages/PM-Advance.aspx>

## **2.2 Diesel Emission Reduction Act Projects**

DAQ completed two Diesel Emission Reduction Act (DERA) projects in 2017, as detailed below.

### **2.2.1 Diesel School Bus Replacement**

The first DERA project scheduled during 2017 was to replace two older diesel school buses. The Delaware Department of Education, the project recipient, is committed to providing schools with reliable, innovative and efficient green transportation solutions. Schools in Delaware are seeking cleaner-burning alternatives to diesel. Although diesel engines burn much more cleanly than those of just a decade ago, schools are motivated by saving fuel costs and reducing school children’s exposure to diesel particulate pollution through the replacement of old school buses with new lower emission school buses.

Air pollution from diesel vehicles has health implications for everyone, but children are more susceptible because they breathe more air per pound of body weight than do adults. Diesel exhaust from school buses contains significant levels of fine particulate matter. Children riding older school buses may be exposed to higher levels of these harmful diesel pollutants.

In 2017, DAQ completed the following DERA projects with the Delaware Department of Education (DDOE) and two private bus contracting companies:

- DDOE – Replaced one existing model year 2002 diesel school bus with a new, cleaner diesel bus in July 2017.
- School Mule – Replaced four existing model years 2001-2003 diesel school busses with new, cleaner propane buses in the winter of 2017.
- Sutton Bus – Replaced four existing model years 2002-2003 diesel school busses with new, cleaner propane buses in the winter of 2017.

### **2.2.2 Amtrak Transfer Table Engine Replacement**

The second DERA project scheduled during 2017 was to replace an existing transfer table engine at the Amtrak yard in Wilmington. The purpose of a transfer table is to transport passenger railcars from multiple track and bay locations. A Caterpillar engine built in 1971 was replaced with a Tier 4 Cummins engine. The existing engine operated 25 hours a week and used 50 gallons of diesel fuel weekly on average.

The operation of the transfer table engine in the City of Wilmington occurs near residential units resulting in health concerns. Of particular concern are particulate matter (PM) and nitrogen oxides (NOx) emissions. NOx emissions are a key precursor to ozone and secondary PM formation. As previously mentioned, New Castle County is designated as non-attainment for the 2015 8-hour ozone standard. This project will reduce diesel engine emissions and conserve diesel fuel. The transfer table engine was replaced and the project was completed by June 1, 2017.

### **2.3 Adopt/Amend Air Regulations**

Delaware remains in non-attainment of federal ground-level ozone requirements and volatile organic compounds (VOC) emissions contribute to the formation of ozone. Since VOC is also a precursor of PM<sub>2.5</sub>, VOC reductions obtained from ozone control measures will assist in meeting the goals of the PM Advance Plan. In addition, SO<sub>2</sub> is also a precursor of PM<sub>2.5</sub>. The sections below summarize activities related to VOC and SO<sub>2</sub> regulations.

#### **2.3.1 Solvent Degreasing**

This regulation was based originally upon the 2001 Ozone Transport Commission (OTC) Model Rule for Solvent Cleaning. In 2010, OTC revised the 2001 model rule, which was approved in 2013. The OTC Model Rule determined that a VOC emission reduction of 89 tons per day would result in the Ozone Transport Region (OTR) in 2014. Based on population, a VOC emission reduction of about one ton per day will result in Delaware upon adopting the OTC rule.

DAQ has begun the regulation revision process and is drafting language for the proposed regulation.

#### **2.3.2 Low Sulfur Distillate Fuel**

DE Admin Code 1108 - Sulfur Dioxide Emissions from Fuel Burning Equipment went into effect on July 1, 2016. The regulation limited the sulfur content of distillate fuel to 15 ppm by weight, effective July 1, 2016. Distillate fuel stored within Delaware prior to July 1, 2016 can only be offered for sale, sold, purchased, or delivered for use in any fuel burning equipment in Delaware through June 30, 2017. This regulation should significantly reduce SO<sub>2</sub> emissions; thus resulting in reduced sulfate PM emissions.

### **2.4 Mobile Sources and Measures**

#### **2.4.1 California ZEV requirements**

During the first year of the PM Advance program DAQ performed preliminary analyses to determine if Delaware should adopt the California Air Resources Board (CARB) Zero Emission Vehicle program. The DAQ continues to evaluate the feasibility of adopting the ZEV program.

#### **2.4.2 Delaware’s Electrified Truck Stops**

The goal in Year 1 was to evaluate the low utilization of the two electrified truck stops in Delaware and develop a proposal to increase usage. In 2014, CabAir, the contractor that installed and maintained the systems, went bankrupt. Currently, the electrification stations at the trucks stops are not operable. The DAQ is investigating solutions to get the stations back in operation.

#### **2.4.3 Evaluate Inspection and Maintenance (I/M) Program for Diesel Trucks**

DAQ has held discussions with the Division of Motor Vehicles to consider inclusion of medium and heavy-duty diesel vehicles in the I/M program. The DAQ continues to evaluate the feasibility of a medium and heavy-duty diesel I/M program.

#### **2.4.4 Idling Workgroup**

In 2005 Delaware established Admin Code 1145 - Excessive Idling of Heavy Duty Vehicles. DAQ initiated an Idling Workgroup in June of 2017. The purpose of the workgroup is to promote education and awareness concerning idling. Stakeholders include DNREC Environmental Crimes Unit, Delaware Department of Transportation (DelDOT), Delaware Fleet Services, State and City Police, City Planning Representatives, Public Health, Nemours Children’s Health System, and several local Metropolitan Planning Organizations (MPOs). The Workgroup held meetings in June and September of 2017. In June, DAQ presented background information about idling and the status of idling prevention measures in Delaware. In addition, the workgroup began drafting a charter, to refine the goals of the workgroup.

DAQ is also working with the OTC Mobile Source Committee’s Idling Workgroup to take a regional approach to idling issues.

#### **2.4.5 SmartWay® Program**

The [SmartWay®](#) Program is a public-private initiative between EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both greenhouse gas emissions and air pollution) of the goods movement supply chains. SmartWay® aims to accelerate the availability, adoption and market penetration of advanced fuel-efficient technologies and operational practices in the freight supply chain, while helping companies save fuel, lower costs and reduce adverse environmental impacts. EPA helps SmartWay® Partners move more goods, more miles with lower emissions and less energy. In May 2016, the Delaware Division of Air Quality became a SmartWay® Affiliate.

In September 2017, DAQ presented information about the SmartWay® Program to members of the DAQ Idling Workgroup. They discussed the opportunities for Workgroup members to become either SmartWay® partners (a company or organization that ships, manages, or hauls

freight) or affiliates (a company or organization that does not ship goods directly but wants to support the SmartWay® program).

## **2.5 DAQ's Moveable Monitoring Platform**

The [Moveable Monitoring Platform](#) (MMP) monitors various ambient pollutant concentrations in areas of concern. These are areas where a permanent monitoring station is not located, and where communities are likely to experience disparate air pollution impacts, such as communities located near major highways, heavy industry, or located in densely populated areas. The MMP has been located near the Eden Park Community, starting in September of 2016. DAQ is using the MMP to evaluate both Total Suspended Particulate (TSP) and PM<sub>2.5</sub> concentrations in the Eden Park Community to determine potential PM exposure.

Preliminary evaluation of data between October 2016 and December 2017, has indicated that concentrations of TSP are significantly elevated in this community, when compared to other locations within the state. Exceedances of the State Secondary Standard for TSP, which addresses environmental impacts and is based on the original NAAQS for TSP, have been recorded 8 times. Therefore, DAQ has focused its efforts on reducing TSP levels in the community. While PM<sub>2.5</sub> levels were comparable to other monitoring sites within Delaware, DAQ anticipates that emission reduction efforts related to TSP may also help reduce levels of PM<sub>2.5</sub> in the area.

DAQ Engineering and Compliance staff conducted site visits in 2017 at 11 permitted facilities within the area, to ensure that facilities complied with dust reduction conditions within their permits. In addition, DAQ followed up on dust complaints from an unpermitted facility and worked with the facility to implement voluntary dust reduction actions.

To help identify potential emission sources in the area, samples of TSP were sent for laboratory analysis in 2017 to determine metals speciation using the same X-ray Fluorescence (XRF) spectroscopy method used for the National Chemical Speciation network. Preliminary data analysis produced profiles consistent with “crustal” or soil material.

DAQ presented monitoring data results to several local community groups in 2017, including: Eden/Hamilton Park Civic Association, All-Civics Association, and New Castle Prevention Coalition. In addition, DAQ has presented information about the study at several outreach events: New Castle Health Fair, Castle Unity Day, Victory Health Fair, and Coast Day.

## **2.6 Transportation and Development Planning**

The Planning Branch of DAQ was very active in participating in work groups and committees associated with transportation and development planning. DAQ participation provides input and recommendations on air quality and environmental health concerns that currently exist in a community or that may result from a proposed project. Some of DAQ's contributions to development planning efforts are highlighted here.

### **2.6.1 Preliminary Land Use Service Reviews**

DAQ provided comments and recommendations for minimizing air quality impacts of proposed development projects in Delaware. DAQ provided these comments through the Preliminary Land Use Service (PLUS) process. The PLUS process involves reviews by all applicable state agencies at the start of the land development process, adding value and knowledge to the process without taking over the authority of local governments to make land use decisions. DAQ staff reviewed over 90 projects in the second year of the PM Advance program.

DAQ has also developed the Delaware Land Use and Impacts Map (DELA-LInks). DELA-LInks is an online web mapping application meant to be utilized as a land use planning tool to inform decision makers, developers, and concerned citizens about the potential for environmental impacts stemming from development.

The application was built utilizing existing environmental data from several sources, including information from the State of Delaware’s open data GIS system called FirstMap. FirstMap is a platform that allows GIS users across various state agencies to share datasets in the form of layers. The DELA-LInks application includes layers generated by the Office of State Planning (“State Strategies for Spending” Levels, Coastal Zone facilities and locations) and EPA (Toxic Release Inventory data). DAQ staff then added emissions projections for proposed development projects, which were calculated from PLUS applications. The application will help the public stay informed about potential air quality impacts in their area from proposed projects.

### **2.6.2 Review of Comprehensive Plans**

DAQ provided recommendations for the proposed comprehensive plan update for Sussex County. DAQ recommended mixed-use development and multi-modal projects to encourage safe and convenient walk and bike paths.

Sussex County included an air quality component in the draft plan, which included the following strategies to help identify opportunities to improve air quality in the County:

- Examine the County’s obligation under federal air quality regulations that promote air quality credits to offset emissions from new transportation projects and
- Reduce auto emissions by supporting alternative travel modes and/or improved traffic flow.

### **2.6.3 New Castle County Unified Development Code**

DAQ provided recommendations for the proposed New Castle County Unified Development Code (UDC). DAQ supported changes that encouraged smart growth, mixed-use development, Complete Streets Design, and multi-modal projects. The UDC was amended in October 2017.

#### **2.6.4 Transportation Corridor Master Plans**

The Division of Air Quality provided extensive comments to WILMAPCO, the largest metropolitan planning organization in Delaware, regarding their proposed Route 9 Corridor Master Plan. Route 9 passes through communities directly south of downtown Wilmington. These communities are in close proximity to the Port of Wilmington and other heavy industry. Truck traffic serving these industries travel along Route 9 and through the communities contributing to diesel fine particulate matter and road dust emissions.

The Route 9 Corridor Master Plan was endorsed by the WILMAPCO Council in May of 2017. WILMAPCO has initiated the Route 9 Corridor Transportation and Land Use Master Plan Monitoring Committee to help guide recommendations of the Master Plan. DAQ has participated in Monitoring Committee meetings. Other participants include local civic and community leaders, and state and county governmental agency representatives.

#### **2.6.5 Volkswagen Settlement**

The recent Volkswagen Settlement will require Volkswagen to fund a \$2.7 billion mitigation trust fund to pay for projects that reduce NOx. The State of Delaware's share of the Environmental Mitigation Trust is approximately \$9 million. Delaware will participate as a beneficiary. DAQ will explore whether proposed projects have the added benefit of reducing PM emissions.

In response to the Settlement, DAQ developed a proposed mitigation plan to accept and distribute these funds to eligible projects in February 2017. The proposed plan is focused on the eligible types of mitigation actions that can produce the greatest air quality benefit in terms of NOx emission reductions, reduce public exposure to diesel particulate matter, and promote clean vehicle technologies. DNREC held a public meeting March 23, 2017 on the VW Environmental Mitigation Plan. DAQ requested input from the public to help develop a final mitigation plan prior to taking any formal action. The DAQ filed Appendix D-3 Certification for Beneficiary Status on behalf of the State of Delaware to become a Beneficiary on December 1, 2017.

#### **2.6.6 Other Multi-modal Transportation Initiatives**

In the past year, the Division of Air Quality has participated in the following workgroups and committees:

- Assisted with development of a regional bike plan for Kent County – completed May 2017.
- Reviewed initiatives of the DelDOT Pedestrian Council (focusing on behavior-based aspects of pedestrian safety).
- Attended WILMAPCO Congestion Management Subcommittee meetings.
- Reviewed and submitted comments on the DelDOT FY18 – FY23 Capital Transportation Plan (the 6 year plan is updated every 4 years).



- Assisted in the implementation of more alternative fueling stations, Electric Vehicle Supply Equipment, and electric/alternatively-fueled Fleet vehicles; in partnership with Division of Energy & Climate (DEC), the Office of Management and Budget, and DelDOT.

In addition, the Governor of Delaware designated October 2017 as Pedestrian Safety Awareness Month, to promote walking as a form of transportation that is environmentally friendly. Also, DEC resubmitted applications for Alternative Fuel Corridor designations for Routes 1, 13, and 113 in 2017.

## **2.7 Grant Funding**

In March of 2017, DAQ applied for EPA’s Community-Scale Air Toxics Ambient Monitoring Grant. Although the project, “Determination of Concentrations and Sources of Air Toxics in an Industrial Environmental Justice Area of Wilmington, Delaware”, was not selected for funding, DAQ continues to explore other avenues for funding an air toxics analysis project related to the MMP project.

## **2.8 Other Delaware Emission Reduction Projects, Control Measures, and Activities**

### **2.8.1 Division of Energy and Climate - DNREC**

#### **Renewable Energy**

- [Green Energy Program](#) – Provides rebates for residential and small scale renewable energy systems.
- [Renewable Energy Portfolio Standards](#) – State has mandates that Delaware’s utilities derive 25% of their energy portfolios from renewable sources by 2025.
- [Offshore Wind Power Working Group](#) – Identifies ways Delaware can benefit economically and environmentally from offshore wind power.
- Delaware Renewable Energy Taskforce – Established to provide recommendations on establishing renewable energy trading mechanisms and other structures to support the growth of renewable energy in Delaware.

#### **Energy Efficiency**

- [Delaware Energy Efficiency Advisory Council](#) – Helps reduce energy loss and cost by developing statewide programs to increase energy efficiency, reduce energy usage, and lower consumer energy costs.
- [The Delaware Energy Efficiency Investment Fund](#) – Helps commercial and industrial customers replace aging, inefficient equipment and systems with energy efficient alternatives.
- [Weatherization Assistance Program](#) – Free program that helps homeowners and renters cut their energy bills by weatherproofing and improving the energy efficiency of their homes.

### **Clean Fuel and Transportation Initiatives**

- [Electric Vehicle Rebates](#) – Offers clean vehicle and charging station rebates.
- [Propane and Natural Gas Vehicles](#) – Offers clean, bi-fuel and heavy-duty vehicle rebates.
- [Delaware Clean Cities Coalition](#) – Helps Delaware residents, businesses, and fleet operators work together to reduce the use of petroleum, develop regional economic opportunities, and improve air quality.
- [Transportation and Climate Initiative](#) – Regional collaboration of 12 Northeast and Mid-Atlantic jurisdictions that seeks to develop the clean energy economy, improve transportation, and reduce carbon emissions in the transportation sector.

### **Green Infrastructure**

- [Green Infrastructure Primer](#) – Provides an introduction to green infrastructure projects and their benefits, as well as information on selecting, building, and maintaining them.

## **2.8.2 DeIDOT**

- [Complete Streets Policy](#) – Policy focuses on implementation during the development or scoping phase of a transportation project to ensure that all users are considered in planning, designing, building, operating, and maintaining Delaware roadways. Governor Jack Markell issued [Executive Order No. 6](#) in 2009 to create a Complete Streets policy for the state of Delaware.
- Congestion Mitigation and Air Quality Improvement Program – This project is part of Delaware’s Transportation Improvement Program (TIP). It supports completion of a statewide network of pedestrian and bicycle pathways, bicycle routes and pedestrian connections, and promotes travel by non-motorized modes for reduced congestion, active transportation choices, access to recreation, and reduced vehicle emissions.
- [Pedestrian Council](#) – Assists DeIDOT with re-evaluation, implementation, and recommendations regarding the Statewide Pedestrian Action Plan and prioritization of pedestrian infrastructure improvements.
- [First State Trails and Pathways Initiative](#) – Public outreach for bicycling, walking, and providing safe and convenient ways to reach local work, shops, schools, recreational sites and transit.
- [RideShare – Delaware Authority for Regional Transit \(DART\)](#) - Aids commuters with finding and using alternative modes of transportation.

### 2.8.3 State of Delaware – Office of Management and Budget

- [Fleet Link](#) – Statewide commuter program for State employees. Vanpools operate on a statewide basis and provide a shared-cost alternative to commuting to work in privately owned vehicles.

### 2.8.4 Electric Utilities

#### Delmarva Power

- [Peak Energy Savings Credit](#) – Customers earn a credit off their bill for every kilowatt hour (kWh) they save below their average energy use.
- [Delaware Energy Wise Rewards™ Program](#) – During the peak electricity demand times in the summer, Delmarva Power automatically cycles off and on participating central air conditioners and heat pumps to help reduce the region's demand for electricity. Customers earn a one-time installation credit and a choice of an energy-saving device.

#### Delaware Electric Cooperative

- [Switch and Save](#) – When periods of peak demand occur, the Co-op automatically signals participating central air conditioning/heat pump cooling units to reduce consumption.
- [Beat the Peak](#) – Member-owners receive text alerts when the Co-op is approaching a period when the price for energy is expected to be high. Encourages voluntary energy-conservation measures. Customers can also sign up to have an in-home “Beat the Peak” indicator installed.
- [LED Light Discounts](#) – Member-owners can receive exclusive deals on energy efficient bulbs.
- [Solar Grants](#) – Grants for home or business solar systems.

#### Delaware Municipal Electric Corporation (DEMEC)

- [Demand Response](#) – When the potential for an extreme weather event is found DEMEC uses models to determine when customers should be asked to reduce electric load. Forecasts are typically given about 24 hours in advance of an upcoming peak and preparations are made to notify customers.

### 2.8.5 Delaware Sustainable Energy Utility

- [Energize Delaware](#) – Energy savings programs for Delaware’s homes, businesses, non-profits, and schools.

### **2.8.6 The Air Quality Partnership of Delaware**

The mission of the Air Quality Partnership of Delaware (AQP), a public/private coalition of businesses, agencies, and individuals interested in clean air, is to raise awareness and inform Delawareans about practices that improve air quality and citizen health. AQP programs include:

- Idling Gets You Nowhere Campaign - Goal of the Campaign is to reduce vehicle idling at schools.

## **Section 3 Year 3 Planned Projects, Control Measures, and Activities**

The following subsections provide information on new and ongoing measures that will provide additional emission reduction benefits to Delaware in 2018. These control measures will not only reduce primary PM<sub>2.5</sub> and its precursors, but many of these measures will also reduce ozone precursors, and help Delaware in reducing greenhouse gases.

### **3.1 Develop and Launch Wood Burning Webpages**

DAQ developed webpages for residential wood burning in year 1 of the PM Advance program. DAQ is now working to roll out a new web pages platform to provide a consistent look and feel across the Department before activating the new pages. DAQ plans to launch webpages for residential wood burning using DNREC's new web pages platform.

### **3.2 Diesel Emission Reduction Act Projects**

In the third year of the PM Advance Program, DAQ has identified the following DERA projects. A total of nine school buses will be replaced in 2018:

- Boulden Bus Inc. – Replace two existing model year 2003-2004 diesel school buses with new, cleaner propane buses.
- Bowman Bus Service, Inc. – Replace one existing model year 2000 diesel school bus with a new, cleaner diesel bus.
- Davis Bus Inc. – Replace one existing model year 2006 diesel school bus with a new, cleaner propane bus.
- Mikerra Transportation, LLC. – Replace one existing model year 2002 diesel school bus with a new, clean diesel bus.
- School Mule – Replace four existing model years 2003-2006 diesel school buses with new, cleaner propane buses.

### **3.3 Adopt/Amend Air Regulations**

In 2018, DAQ plans to pursue the following regulatory actions:

### **3.3.1 Solvent Degreasing**

Work on the solvent degreasing regulation will continue with anticipated completion in 2019.

### **3.3.2 Sandblasting**

In DE Admin Code 1102 – “Permits”, sandblasting qualifies for an exemption from the requirements to have an air quality permit in Delaware. DAQ has begun the regulation revision process to remove the permit exemption for outdoor dry abrasive blasting of certain water tanks. Permitting of this activity will lead to a reduction of particulate and lead emissions.

### **3.3.3 Stage II Decommissioning**

Stage II vapor recovery is technology that prevents gasoline vapors from escaping into the air during refueling. This process takes the vapors normally emitted directly into the atmosphere when pumping gas and recycles them back into the fuel storage tanks, preventing them from polluting the air. Since 1998, new passenger cars, light-duty trucks, and most heavy-duty gasoline powered vehicles have been equipped with onboard refueling vapor recovery (ORVR) systems. Since ORVR controls are now widespread in use, EPA has allowed states to phase-out Stage II vapor recovery systems.

In addition, the ORVR system and the vacuum-assist Stage II system, such as those mainly installed in Delaware’s gasoline stations, are incompatible. Such an incompatibility causes extra vapor emission when refueling an ORVR-equipped vehicle at a Stage II-equipped station.

DAQ has begun the process to revise the pertinent sections in 7 DE Admin. Code 1124 to allow decommissioning of Stage II vapor recovery systems in Delaware along with incorporating technology, inspections and testing requirements for a well-controlled Stage I system to ensure gas stations remain vapor tight. The regulatory revisions are anticipated to take effect in early 2019.

## **3.4 Mobile Sources and Measures**

### **3.4.1 Idling Workgroup**

DAQ is in the process of developing a charter for the Idling Workgroup. DAQ also plans to promote the SmartWay® Program through the workgroup, to help increase SmartWay® membership.

### **3.4.2 SmartWay® Program**

DAQ plans to develop and launch a webpage for the SmartWay® Program.

### **3.4.3 Roadside Monitoring**

The Clean Air Act Amendments of 1990 require Enhanced I/M program areas to supplement emissions testing at stations with on-road testing. On-road testing is defined as testing of vehicles for conditions impacting the emission of Hydrocarbons, CO, NO<sub>x</sub> and/or CO<sub>2</sub> emissions on any road or roadside in the nonattainment area or the I/M program area. DAQ plans to implement a multi-year remote sensing design (RSD) study to be completed as a supplemental emission measurement on at least 0.5% of vehicles subject to I/M testing.

### **3.5 DAQ's Moveable Monitoring Platform**

DAQ will continue using the MMP to evaluate both TSP and PM<sub>2.5</sub> concentrations within the Eden Park Community into 2018.

To further address the Eden Park Community's concerns regarding dust and air pollution related health issues, DAQ plans to conduct a Dust Distribution Study using portable samplers within the Eden Park Community. This is an extension of the larger Eden Park Community Air Quality Study using the MMP. Samplers will be located with the MMP and throughout the community to determine whether concentrations of PM and VOCs vary within the community of Eden Park. In addition, DAQ plans to send out additional samples of TSP for laboratory analysis in 2018, using the XRF spectroscopy method.

DAQ will continue to conduct outreach in the area to communicate their findings and educate about air quality monitoring efforts and general PM health impacts. DAQ will also work with the community to find solutions to PM issues. DAQ plans to maintain the MMP in Eden Park into 2018. DAQ will draft a final report at the completion of the Eden Park study. The report will provide the community with valuable monitoring results, which can help empower local community members to influence state and local decision making. After completion of the Eden Park study, DAQ will utilize complaint data and modeling to determine the next study area for the MMP.

### **3.6 Transportation and Development Planning**

The Planning Branch of DAQ plans to continue to be very active in participating in work groups and committees associated with transportation and development planning. Some of DAQ's planned activities for Year 3 are listed below:

#### **3.6.1 Preliminary Land Use Service Reviews**

The Division of Air Quality will continue to provide comments and recommendations for minimizing air quality impacts of proposed development projects in Delaware as long as the Department remains engaged in this process.

### **3.6.2 Review of Comprehensive Plans**

The Division of Air Quality will continue to provide recommendations for proposed comprehensive plans in Delaware. The Cities of Wilmington and New Castle and Kent County are currently updating their comprehensive plans. Sussex County plans to adopt an updated version of its Comprehensive Plan by June 2018.

### **3.6.3 Transportation Corridor Master Plans**

DAQ will continue to participate in the Route 9 Corridor Transportation and Land Use Master Plan Monitoring Committee, to assist with the implementation of the Master Plan.

### **3.6.4 Volkswagen Settlement**

The Division of Air Quality plans on receiving Beneficiary status and developing an Environmental Mitigation Plan for 2018. The plan is expected to provide the public with insight into the State of Delaware's vision and overall approach for uses of the mitigation funds allocated under the Trust. The primary goal of the State of Delaware's mitigation plan is to improve and protect ambient air quality by implementing eligible mitigation projects that will:

- Achieve significant and sustained reductions in diesel emission exposures in areas designated as poor air quality areas, areas with historical air quality issues, and areas that receive a disproportionate quantity of air pollution from diesel fleets, and
- Expedite deployment and widespread adoption of zero emission and near-zero emission vehicles and engines.

### **3.6.5 Other Multi-modal Transportation Initiatives**

In Year 3, the Division of Air Quality anticipates participating in the following workgroups and committees:

- Review initiatives of the DelDOT Pedestrian Council.
- Attend WILMAPCO Congestion Management Subcommittee meeting.
- Assist in the implementation of more alternative fueling stations, Electric Vehicle Supply Equipment, and electric/alternatively-fueled fleet vehicles; in partnership with DEC, the Office of Management and Budget, and DelDOT.

### **3.7 Grant Funding**

DAQ plans to seek funding through PM Advance related grants to implement projects and studies that will reduce PM emissions.

### **3.8 2014 NATA Data**

In 2018, EPA plans to release the final 2014 National Air Toxics Assessment (NATA) data. DAQ will use NATA data to help identify areas with elevated PM emissions and to assist in prioritizing local emission reduction efforts in Year 3 and beyond.

## **Section 4 Year 3 Planned Stakeholder Engagement**

Stakeholder engagement and collaboration is an important aspect of accomplishing PM<sub>2.5</sub> emission reductions through voluntary and regulatory measure under the PM Advance program. DAQ plans to complete the following activities in Year 3.

- DAQ has developed a PM Advance website to inform stakeholders and the public of the PM Advance program. The website will be maintained and updated, as new projects are developed and existing project progress. The website will also serve as a resource for the citizens of Delaware to understand the adverse health effects of fine particulate matter, and to know the sources of PM<sub>2.5</sub> that impact Delaware air quality.
- Engage with DelDOT and the metropolitan planning organizations within Delaware to identify PM emission reducing projects in the context of transportation planning.
- Meet with health and environmental advocacy groups throughout the state to obtain concerns they have regarding emissions of and exposure to PM<sub>2.5</sub> in Delaware. Solicit ideas on approaches that DAQ could implement to reduce emissions and exposure.
- Inform health and environmental advocacy groups of potential funding sources, such as grants. Encourage these local groups to develop ideas for community driven projects to reduce PM emissions and exposure to PM.
- As DAQ assesses disparate air quality impacts on certain communities within Delaware as part of its on-going strategic plan, DAQ will work with communities through the PM Advance Program to find solutions when the impacts are a result of fine particulates.
- Seek public input of Delaware's PM Advance Program through direct interaction with civic and environmental advocacy groups. DAQ will post PM Advance Plans on its website and seek public input on proposed PM Advance projects and activities.
- Develop outreach materials regarding PM Advance for local communities and stakeholder groups.
- Set up informational booths about PM Advance related projects at local environmental and health outreach events such as the local health fairs, Delaware Coast Day, etc.



## **Section 5 PM Advance Reporting Requirements**

As part of the 5-year Plan, DAQ will report annually to EPA on the programs contained within this document, as well as new programs developed during each year and anticipated in the subsequent year. DAQ is on a calendar year schedule for its PM Advance reports. Therefore, the next report to EPA will summarize activities through December 31, 2018 and identify projects and activities anticipated to take place in 2019.