

Maryland Inter-Agency Workgroup Air Quality Voluntary Agreement 2019 Accomplishments



Maryland
Department of
the Environment

What was accomplished

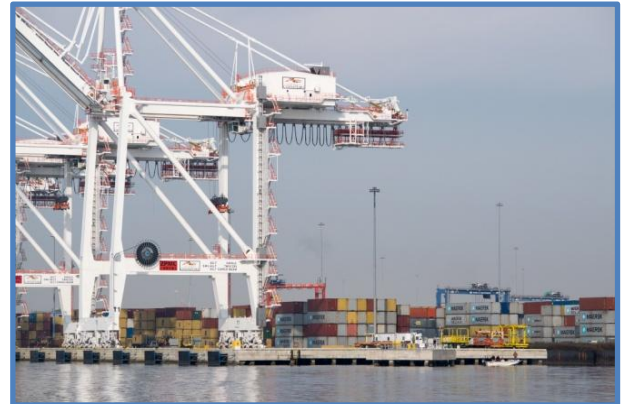
*Since 2008 the Port has received \$11 million in USEPA grants to **upgrade and buy new equipment and vehicles**. In 2019 the workgroup helped with grant-funded emissions reduction projects:*

Volkswagen Mitigation Fund – Coordinated in identifying potential NOx-reducing projects at the Port and nearby from Canton Railroad, Ports America Chesapeake, T. Parker Host, the Baltimore Compost Collective, and Marshall's Trash Removal.

FY 2018 + FY2019 DERA Grants – replacing older dray trucks hauling to and from the port, cargo handling equipment and Spirit of Baltimore cruise ship engines.

Locomotives and cargo handling equipment – installing automatic idle reduction technology.

Harbor tugs – identifying older tugs to receive new cleaner engines.



Community Focus

MDOT MPA and MDE have increased their outreach efforts by:

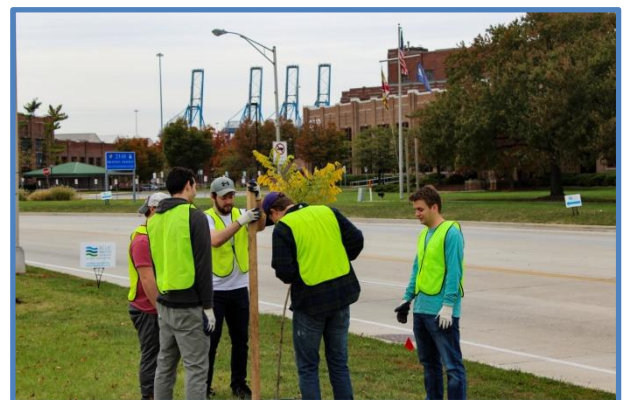
Attending community meetings to give presentations on air quality and work done to reduce air emissions, plus learn of community concerns and focus areas.

Developing relationships with faith-based and other organizations in West Baltimore, Brooklyn, Dundalk and additional areas near the Port of Baltimore.

Giving and participating in tours showing Port operations to community members, EPA staff, Chesapeake Bay Foundation, and private terminal operators.

Teaming with the Maryland Motor Truck Association to promote the Idle Free MD campaign to discourage unnecessary engine idling, and giving outreach materials to truck drivers.

Presenting Port environmental accomplishments and future plans to outside groups and agencies.



Maryland Inter-Agency Air Quality Voluntary Agreement

2019 Accomplishments

“The purpose of this Voluntary Agreement is to document and confirm the Parties’ ongoing commitment to pursue mutually agreeable and cooperative efforts that will sustain and advance the economic health of the Port of Baltimore and protect the environment of the State of Maryland.”

Since December 2015, the Maryland Department of the Environment (MDE), the Maryland Department of Transportation (MDOT), and the Maryland Port Administration (MPA) have worked to identify, develop and when appropriate, implement voluntary projects that will reduce emissions and increase energy efficiency. As part of this Voluntary Agreement, a workgroup of representatives from the participating agencies was created to pursue its goals. This report summarizes the workgroup’s 2019 activities and accomplishments.

Project Implementation

Since the Port’s Diesel Equipment Upgrade Program was launched in 2008 the Port has received \$11 million in DERA grant funds for upgrading and purchasing equipment and vehicles. The workgroup’s 2019 efforts assisted several emissions reduction projects and grant-supported projects, including:

Volkswagen Mitigation Trust Fund – MDE has received applications for NOx-reducing projects at the Port and in surrounding communities from Canton Railroad, Ports America Chesapeake, T. Parker Host, the Baltimore Compost Collective, and Marshall’s Trash Removal.

FY 2018 DERA Grant – MPA received \$2.45 million to replace dray trucks that haul to and from the port, cargo handling equipment and replace engines in the Spirit of Baltimore cruise ship. MDE received a DERA grant for \$276,383 to continue supporting the MPA dray truck program

FY 2019 DERA Grant – MDOT MPA received \$1.8 million to continue its dray truck and cargo handling equipment replacement efforts.

Port Air Quality – The workgroup studied how the Port’s emissions reduction activities helped Maryland’s State Implementation Plan for complying with federal air quality standards.

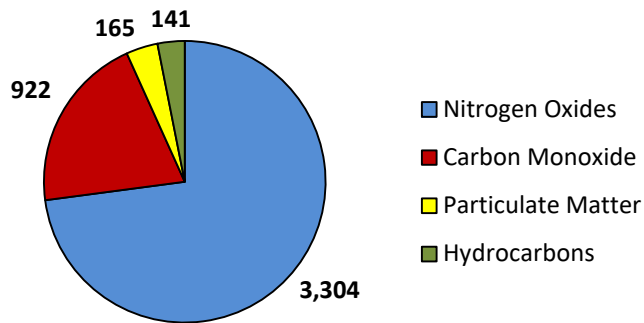
OWLETS 2 – Analysis has continued on the data collected during the MDE/MDOT MPA partnership’s second Ozone Water-Land Environmental Transitions Study to measure ozone formation and breakdown over land and water areas, including maritime traffic and land-based potential sources.

Emissions Reduction and Energy Conservation Projects

In addition to continuing to research activities, technologies, and equipment that might potentially reduce harmful air emissions and/or conserve energy, the workgroup prioritized those that could result in improved air quality for communities near Port operations. The workgroup focused on the following in 2019:

- Automatic idle reduction technology for locomotives and port equipment
- Cargo handling equipment (forklifts, yard tractors, top loaders, and cranes) replacement and engine repowers
- Dray truck replacement – providing partial purchase price to replace older polluting trucks
- Harbor tugs – identifying older tugs to receive new cleaner engines

Pollutants Reduced Since 2008 From Port's Diesel Equipment Replacement Program (in tons)



Air Pollutant Sources and Air Pollution Reduction Technologies

Using air emissions inventories developed by MPA, the workgroup continued to identify the technologies and activities to best address Port-related sources of air emissions. MPA engaged a Fellow from the Environmental Defense Fund's (EDF) Climate Corps Program to research the potential carbon sequestration ability of dredged material on Hart Miller Island's restored wetlands. The study concluded that the island has long-term CO₂ storage potential. Carbon sequestration benefits may be added to MDOT MPA's greenhouse gas inventory as an offset to other carbon emissions. More extensive study was recommended at Poplar Island, a similar dredged material placement location.

Identifying and Targeting Potential Funding Sources

The workgroup continued to identify potential funding sources for projects. Its list currently includes:

- EPA's Clean Diesel Program
- EPA's Environmental Education Local Grants Program
- US Department of Transportation's Better Utilizing Investments to Leverage Development Discretionary Grant Program

- Federal Highway Administration's Congestion Mitigation and Air Quality Improvement Program
- US Maritime Administration's Grant and Assistance Programs
- US Department of Energy Grant Programs
- MDE's Environmental Penalty Settlements
- Maryland Energy Administration
- Maryland Clean Energy Center
- Federal and State Volkswagen Diesel Vehicle Settlements
- Climate Access Fund

Activities to Expand Stakeholder Engagement and Awareness

MDOT MPA and MDE continue to place a high priority on increasing stakeholder engagement. The workgroup continues to focus on underserved areas in its outreach efforts.

Community Engagement

- Attending community group meetings to provide presentations on air quality and the agencies' efforts to reduce air emissions.
- Developing relationships with representatives of faith-based and other organizations in West Baltimore, Brooklyn, Dundalk and additional areas near the Port.
- Providing and participating in tours sponsored by the Baltimore Port Alliance for community members to give them a first-hand look at Port operations.
- Providing and participating in tours for EPA regional and national staff, Chesapeake Bay Foundation, and private terminal operators to familiarize them with successful grant-funded Port projects and discuss future possibilities.
- Teaming with the Maryland Motor Truck Association to promote the Idle Free MD campaign which discourages unnecessary

engine idling that contributes to harmful air emissions.

- Providing outreach materials to truck drivers serving Seagirt Terminal explaining the importance of idle reduction.
- Including private Port tenants in the workgroup's monthly meetings to exchange information and ideas.
- Creating and marketing a Diesel Equipment Upgrade Program website and producing a video on cargo handling equipment replacements.
- Presenting Port environmental accomplishments and plans to outside groups such as the Maryland Port Commission, Maryland Department of Transportation's environmental justice workshop, and the Air Quality Control Advisory Council.
- Publishing accomplishments and events in the GreenPort newsletter, MDE Heron, Port of Baltimore magazine, and in social media.
- Participating in a tree planting day sponsored by Blue Water Baltimore along Broening Highway.

Community Grants

- Assisting Marshall's Trash Removal in Turner Station to apply for a Volkswagen Mitigation Fund grant to replace an older trash truck.
- Working with Curtis Bay/Brooklyn citizens to apply for a new truck for the Baltimore Compost Collective.
- Meeting with Baltimore City to consider replacing older engines for Inner Harbor trash skimmers and water taxis.
- Investigating the Climate Access Fund for local solar energy projects.
- Helping the Greater Baybrook Alliance, Safe Alternative Foundation for Education (SAFE) and Maryland Association for Environmental and Outdoor Education apply for EPA Environmental Education grants.

Maryland's Air Quality

Maryland's air quality has dramatically improved in the last 20 years. Many challenges had to be overcome to protect public health and the environment from the effects of ground level ozone. Improvements in fuel efficiency, cleaner fuels and diesel engines, and efforts by the private sector to lower emissions at ports and airports greatly reduced NOx emissions. Maryland's levels of fine particles are now well below the daily and annual standards. SO₂ pollution has decreased in the past 10 years, driven by the Healthy Air Act and switching from coal to natural gas by power plants and large industries, and by regulations requiring low sulfur fuels for heavy engines and home heating.

The Clean Cars Act of 2017 dramatically reduced NOx and greenhouse gas emissions by requiring vehicles purchased in Maryland to be the lowest emitting vehicles allowed by law, and played a major role in helping the State to reduce ozone and fine particulates and meet climate change goals. That law and the Greenhouse Gas Emission Reduction Act of 2016 show Maryland is working on initiatives to reduce climate change pollutants. New opportunities for reductions include minimizing transported air pollution effects on Maryland and continuing to support federal and regional policies that enable clean air progress.

Conclusion

The agreement's goal of pursuing cooperative efforts to sustain and advance the economic health of the Port of Baltimore while protecting the environment and public health is being met through the ongoing efforts of the workgroup.

