



Ben Grumbles, Secretary of the Environment  
Gregory Slater, Secretary of Transportation

Larry Hogan, Governor  
Boyd K. Rutherford, Lt. Governor

April 9, 2021

The Honorable William C. Smith, Jr.  
Chair, Judicial Proceedings Committee  
Miller Senate Office Building, 2 East Wing  
11 Bladen Street  
Annapolis, MD 21401

The Honorable Kumar P. Barve  
Chair, Environment and Transportation Committee  
House Office Building, Room 251  
6 Bladen Street  
Annapolis, MD 21401

Dear Chairpersons Smith and Barve:

Thank you for your recent letter regarding the Maryland Department of Transportation Motor Vehicle Administration's (MDOT MVA) and the Maryland Department of the Environment's (MDE) planned modernization of the Vehicle Emissions Inspection Program (VEIP). As the Secretaries of these respective agencies we would like to provide background on the state's modernization efforts.

Environmental stewardship is a top priority of our agencies, and we remain committed to ensuring cleaner air for all Marylanders. The state's planned VEIP modernization efforts take into consideration the significant improvements in vehicle technology along with the tremendous progress our state has made toward cleaning our air, to more accurately calibrate emissions testing requirements and provide better customer service for the citizens of Maryland. It is important to note that the planned VEIP enhancements are consistent with federal rules and guidance and, based upon review by the Attorney General's Office, authorized under Maryland law.

Modernization of a state's vehicle emission inspection program is not a new concept. California, the state with the country's worst ozone problem and best expertise in mobile source controls, introduced in 2005 the nation's first modernization efforts. California is already implementing an eight-year extension before new vehicles are required to get a test, which is two years longer than is proposed in Maryland, and several of the other program enhancements planned in Maryland. Many other states, including our neighbors in Delaware and New Jersey are already implementing measures similar to those planned in Maryland. The modernization efforts are driven by significant improvements in vehicle technology, tremendous progress in the state to clean the air, and the overarching need to maximize customer service for the citizens of Maryland.

We are happy to provide you with the current information on the status of the state's air quality and how the VEIP modernization effort will have no impact on continuing the dramatic air quality progress the state has made. We have also offered to provide a more detailed briefing if that should be desired.

Maryland has a long, negative history on air quality. In 1991, Maryland had areas designated by the U.S. Environmental Protection Agency (EPA) as “severe” for ground level ozone under the 1990 Clean Air Act (CAA) amendments. This meant that only a few areas in California had worse ozone air quality than Maryland. In 2005, Maryland was designated as a nonattainment area for fine particle pollution, the highest risk air pollutant the state regulates. In 2005, in a relatively famous MIT study, Maryland’s air was identified as the riskiest air to breathe in the eastern half of the country. In 2008, as part of the process for a strengthened ozone standard, the Baltimore area was designated as the worst ozone area anywhere outside of Texas and California. That has all changed.

Currently, the state is meeting all federal health-based air quality standards except for ground level ozone. Maryland came into attainment for the fine particle standard in 2012. Measured fine particle levels are now well below the standard across the state and continue to trend downward. For ozone, in 2020, MDE measured the lowest ozone levels ever recorded, having just three days where small areas of the state barely went above the standard. Like fine particle air pollution, the ozone levels have been getting lower and lower each year. Ozone has been a particularly difficult problem to solve as our research partnership with the University of Maryland shows that, on bad air quality days, about 70% of Maryland’s ozone problem originates in upwind states. The state is on the verge of meeting all federal health-based air quality standards for the first time ever. A more detailed summary of the progress Maryland has made to clean the air can be found on the MDE [website](#). This clean air progress report is being updated for 2021, and is expected to be released during Air Quality Awareness Week from May 3 to May 7, 2021.

The Maryland General Assembly deserves much of the credit for driving the progress made in Maryland on clean air. The 2006 Maryland Healthy Air Act has proven to be the single largest program ever to improve air quality in Maryland. It is one of the primary reasons the state is well below the fine particle standard and approaching attainment for ozone. The air quality improvement resulting from the emission reductions achieved by this law exceeded expectations. The 2007 Maryland Clean Cars Act, which required Maryland to adopt the California Clean Cars Program, has also played a major role in helping the state make progress on ozone. MDE has also adopted over 300 emission reduction regulations since 1990 covering every emission source you can imagine - from hair spray to incinerators. MDE has also initiated legal action to reduce emissions in upwind states like Pennsylvania and West Virginia. In addition to addressing criteria pollutants under the CAA, all of these efforts have either directly or indirectly helped the state make progress on reducing greenhouse gas (GHG) emissions.

The state’s efforts to modernize the VEIP will have no impact on our efforts to continue to lower air pollution and reduce GHG emissions. The significant air quality improvements in Maryland, along with the dramatic vehicle technology advancements, now allow the state to modernize the VEIP to create a much more user-friendly program for Maryland motorists while continuing to protect air quality for all.

New vehicles are more than 95% cleaner than new vehicles in 1980. The introduction of catalytic converters, fuel mixture controls, and other emissions components helped initiate this progress, continuing advancements in computers and electronic controls. It all came together when these separate technologies were integrated into one comprehensive, computer-controlled system, called the On Board Diagnostics (OBD) system. The OBD system allows our modern, increasingly stringent emissions standards to be achievable. The OBD system monitors virtually every component that can affect emissions performance. Each emissions-related component is checked by a diagnostic routine to verify that it is functioning properly. The continual, comprehensive monitoring allows the OBD system to keep track of vehicle health over the full range of operating conditions and identify malfunctioning or deteriorating components. OBD started out as an on-board engineering analysis system for automotive designers, then evolved into the powerful

emissions monitoring and testing system that works to ensure that the low emissions levels vehicles are now designed to meet are sustained over the useful lifetime of the vehicles.

In explaining their eight-year extension before consumers need to have their new vehicle tested, California said that the vast majority of newer vehicles are equipped with cleaner technologies that typically pass smog checks in the first eight years. This means that consumers would save money since the average smog test costs between \$29-69.

The VEIP is a very effective program that was critical in keeping vehicles of the 1980s and 1990s running cleanly. However, now as newer, cleaner vehicles constitute a large portion of the overall vehicle population, its effectiveness has reduced. The big emissions reducers in the modern era are power plant controls, controls in upwind states to reduce transport, heavy-duty truck improvements, and vehicle electrification.

MDE is already working to achieve additional emission reductions in all of these areas. Maryland's 2015 nitrogen oxides (NOx) regulations, the Regional Greenhouse Gas Initiative (RGGI), and market forces have and will continue to drive dramatic reductions from power plants. By 2030, all coal-fired power plants, the largest stationary source emission category in Maryland, will likely no longer operate. Maryland will continue to take legal action and work with the EPA, the Ozone Transport Commission (OTC) and other states to address air pollution coming into Maryland. The OTC action under Section 184(c) of the CAA, triggered by a petition from Maryland that asked the EPA to require the operation of coal-fired power plant emission controls in Pennsylvania consistent with Maryland's regulatory requirements, is expected to be decided within the next few months.

MDE is also implementing initiatives to reduce emissions from heavy-duty trucks and emphasizing zero emissions vehicles. Emissions from medium- and heavy-duty trucks are the fastest growing sources of emissions in the transportation sector, and the number of truck miles travelled is forecast to grow significantly in the coming decades. New initiatives that will require more stringent emissions standards for newly manufactured trucks and an acceleration of their electrification are essential to reducing emissions. Both the EPA and California are evaluating more stringent emissions standards for newly manufactured trucks that will provide a 90% reduction in NOx emissions effective in the 2024-2027 timeframe. MDE is monitoring these efforts and coordinating with stakeholders to bring about the greatest emissions reductions possible. Maryland is also working on truck electrification, and in July 2020 joined 14 other states and the District of Columbia in signing a joint agreement committing to work collaboratively to advance and accelerate electric truck deployment for a sector that includes large pickup trucks and vans, delivery trucks, box trucks, school and transit buses, and long-haul delivery trucks. These efforts will build upon our successful efforts for electric cars and trucks.

Recent transportation programs continue to provide increasingly greater emission reductions as vehicle fleets turnover. Cars today, and the fuels that power them, are significantly cleaner than they were just a decade ago. The best-known programs are the Maryland Clean Cars Program and the Tier 2 and Tier 3 Vehicle and Fuel Standards. These programs combine more stringent new car emissions standards with low sulfur gasoline to reduce NOx emissions from the cars we drive. California is working on developing its next round of clean car standards, and MDE is monitoring its efforts in order to continue to ensure that the cleanest vehicles are available in Maryland.

Other ongoing state efforts to reduce emissions include the Idle Free Maryland Program, which encourages common sense actions to eliminate unnecessary idling and educates motorists on the benefits of reducing excess idling, a stepped-up effort to address tampering with small and large vehicles' emission control

systems, and an interagency Port of Baltimore partnership that has been successfully working on projects of mutual interest that improve air quality and enhance the business environment. Technology advancements through the years are allowing us to implement new programs that will provide significant air quality benefits moving forward, preserving and enhancing the state's effort to provide cleaner air.

Your February 26, 2021, letter included several specific questions. Detailed responses to your questions are attached.

Thank you again for your letter and your interest in this important environmental program. We hope you find this information helpful. If either of us may be of further assistance, please contact MDOT MVA Administrator Christine Nizer at 410-787-7830 or [cnizer@mdot.maryland.gov](mailto:cnizer@mdot.maryland.gov) or at MDE at 410-537-3084 or [ben.grumbles@maryland.gov](mailto:ben.grumbles@maryland.gov).

Sincerely,



Gregory Slater, Secretary  
Maryland Department of Transportation



Ben Grumbles, Secretary  
Maryland Department of the Environment

## MDOT and MDE Responses to Senator Smith's and Delegate Barve's Questions on the Vehicle Emissions Inspection Program

The agencies offer the following answers to your specific questions regarding the proposed VEIP modernization effort, which include the extension of the first testing requirement for new vehicles until the sixth year of ownership, an increase in the use of customer friendly self-service kiosks, and remote OBD technology, allowing remote tests to be conducted by "hybrid" stations that are private businesses, and potential future closure of some of the state-owned testing stations based on demonstration of sufficient alternative testing options for motorists.

**Question 1:** Have these changes been shared with the Governor's Climate Change Commission or any other public body with interest in or oversight over air quality programs?

Response: MDE has submitted its final 2030 Greenhouse Gas Reduction Act Plan (GGRA Plan) to Governor Hogan and the Maryland General Assembly. The Plan is a comprehensive, forward-looking, and balanced action plan focused on curbing carbon emissions to address climate change. Additionally, the Maryland Commission on Climate Change (MCCC) has submitted its annual report and recommendations to Governor Hogan and the General Assembly. While both the MCCC recommendations and MDE's GGRA Plan include key measures to minimize transportation-related carbon, VEIP is not part of those measures or recommendations. The purpose of the VEIP is to control vehicle emissions that lead to the formation of ground-level ozone, a pervasive air pollutant that harms human health. The VEIP has a minimal impact on reducing mobile sources of GHG emissions.

The VEIP changes are subject to review by the Maryland Air Quality Control Advisory Council (AQCAC), as required by statute. AQCAC reviews draft air quality regulations in consideration of air quality and public health goals, evaluates air pollution control measures as requested by MDE, and advises MDE on proposals by recommending adoption, rejection or modification. AQCAC includes representatives from industry, labor, professional associations, local and regional government organizations, academia, farming, the medical community, and the general public. AQCAC meetings are open to the public. MDE has been communicating plans for the VEIP enhancements to AQCAC since December 2018. MDE has also posted public information on its website. As part of the regulation adoption process, a public notice and hearing will be held on the regulations that embody the enhancements, giving stakeholders further opportunities to submit comments and provide input. Additionally, the VEIP changes are subject to review by the Administrative, Executive, Legislative Review (AELR) Committee.

**Question 2:** Has MDE analyzed the impacts on the State's air quality resulting from the planned or future changes? Has MDE sought federal approval of any changes?

Response: MDE has analyzed the air quality effects of deferring the initial inspection of the newest vehicles from the current age of three years until the age of six years and has found the impact to be negligible. The deferral of the initial inspection is not a full-out exemption. Vehicles in this age range continue to be subject to testing in the event of change of ownership and if a vehicle is brought into Maryland after being previously registered in another state.

This VEIP enhancement and modernization is possible due to Maryland's overall clean air progress, as well as the tougher emissions standards currently in force for newly manufactured vehicles, which are backed up by mandatory warranties that ensure long-lasting emissions control systems performance. The VEIP failure rate for vehicles in this age range is very low, at about 1.3% of tested vehicles. Deferring the initial VEIP test

requirement until a later date for these newer, cleaner vehicles is a common-sense enhancement that will benefit many Maryland motorists, while preserving air quality progress.

Further, allowing some vehicles to be tested outside of the current centralized program at hybrid stations, which are private businesses that motorists already visit for other vehicle services, will have no effect on the air quality benefits of the program.

EPA has already approved the enhancements to the VEIP planned in Maryland in other states. MDE has been working with EPA for several years on this effort to modernize the VEIP while continuing to make progress on clean air.

**Question 3:** To the extent that air quality is diminished, which measures are being proposed by MDOT or MDE to make up for any loss in air quality?

Response: Given Maryland's dramatic air quality progress and the negligible impact of the VEIP modifications, no diminishment of air quality is expected and no replacement measures are needed.

**Question 4:** Beginning in 2018, the model year exemption was increased from 2 model years to 3 model years. This action was taken by regulation not legislation. Did MDOT/MDE consider submitting legislation during the 2021 session to expressively authorize the change in exemption?

Response: MDOT MVA and MDE have worked closely together over the years to make administrative modifications to the VEIP operations as part of our continuous improvement efforts. These changes, as well as those proposed in the new Request for Proposals (RFP), accommodate the ongoing advancements in technology and innovation in both the vehicle manufacturing and vehicle emissions testing industries. The outcome is an emissions program in Maryland that is characterized by more efficient and more accurate vehicle testing, low failure rates among newer vehicles, and fewer requirements for motorists to make expenditures on emissions-related repairs, all while continuing to protect air quality. It is our intention to update the VEIP regulations to reflect the new program components identified in the RFP, including the delay of the initial testing requirement for new vehicles from the age of three model years to the age of six model years. The deferral of the initial testing requirement is appropriate given the significant improvements in vehicle technology that ensure vehicles are built cleaner from the start and maintain the lower emissions levels for a longer period of time than in the past. Based on the review of the RFP by the MDOT MVA Assistant Attorney General, it has been determined legally sufficient and we believe that existing statutory language is sufficient to enable this enhancement with appropriate regulatory changes.

As described above, the process for regulatory changes includes review by AQCAC, and AELR, as well as a public hearing where stakeholders may offer input and express their views.

**Question 5:** What will be the process to determine which centralized stations will be closed? Will input from local legislators be sought? Will public hearings be held?

Response: Through the RFP process, the agencies are asking the emissions testing vendors to provide plans for system modernization that may include closure of some low-volume stations while ensuring the continued provision of the high levels of customer service and consumer protection that Maryland motorists expect. These firms have significant expertise in operating VEIPs in many states - expertise which may be transferable to the Maryland VEIP. Our RFP also encourages the introduction of customer convenient testing methodologies such as remote OBD to give Marylanders additional choices and options.

It is our intent to continue to administer the VEIP in a manner that is convenient for customers, operationally efficient, and economically sound for the state. While consideration of centralized testing station closures is allowed under the RFP, those decisions would only be made when adequate alternative testing options are available in that county and only after close monitoring of the volume of activity of each station over a reasonable period under the new program changes. MDOT MVA and MDE will work closely with the awarded contractor to identify all factors for consideration in station closing, but the ultimate decision will be made by the state. This process will include ensuring that alternatives to centralized stations, such as self-service kiosks, the advanced technology remote OBD option, hybrid station testing by local businesses and motorist assistance outlets, are readily accessible to consumers in the impacted communities. MDOT-MVA and MDE will consider public feedback as these issues are analyzed.

**Question 6:** If private repair facilities are allowed to conduct VEIP tests, how will consumer interests be protected? Will the private repair facilities be authorized to charge a fee to cover their costs?

Response: The hybrid station component of the VEIP serves to make emissions testing more convenient and accessible to Maryland residents and businesses. It will complement, not supplant, the current program. The inclusion of repair facilities and vehicle fleets in the program as well as options for remote OBD testing, where a consumer can use a device that is either built in or easily attached to the vehicle to conduct an emissions test, provides consumers the ability to access emissions testing in the way they want and at their convenience. As stipulated in the RFP, these providers will be subcontractors to the vendor awarded the VEIP contract. As such, in their response to the RFP, vendors are required to identify how they would engage subcontractors to provide emissions testing, including quality assurance activities and the provision of customer service that is in the best interest to the public and the state. Since the state is engaged in an active procurement (RFP V-HQ-20090-S issued on January 29, 2021), our response to this question must be limited so as to not jeopardize the procurement.

You also asked for an update on VEIP operations and the effects of the closure of the centralized VEIP stations while the facilities were used by the state for COVID-19 testing. After a seven-month closure during which 11 out of the 18 VEIP stations were used as COVID testing sites, allowing over 42,000 COVID-19 tests to be conducted, operations officially resumed with all stations and 24-hour VEIP self-service kiosks opening on October 19, 2021. As part of the VEIP station reopening plan, MDOT MVA implemented several safety and operational changes to prevent the potential spread of COVID-19, including modifying test procedures to avoid having inspectors enter the vehicle, ensuring social distancing between customers and inspectors, requiring face masks, and instituting appropriate procedures for sanitizing facilities for personnel and customers. New, extended vehicle testing dates were provided for customers that had been previously scheduled from March 2020 to October 2020, and we continue to review operational needs as appropriate. To date, more than 600,000 emissions tests have been conducted since reopening.