

# Clean Air Courier

News about transportation technologies, choices and the environment

## VEIP Begins OBD Testing in July 2002



The Maryland Vehicle Emissions Inspection Program (VEIP) has been an important part of the State's efforts to clean the air and protect our health since the mid-1980s. Since that time, emissions control systems on vehicles have been greatly improved by manufacturers and our emissions testing technology and procedures have been adapted to accurately measure emissions and identify those vehicles that pollute the air.

A significant improvement in vehicle emissions control technology is the On-Board Diagnostics II (OBD II) system that has been on light duty gasoline vehicles since model year 1996. The OBD system monitors all aspects of vehicle performance that either directly or indirectly affect emissions. OBD provides a universal system of problem detection and reporting that greatly enhances the ability to prevent air pollution and costly repairs. Many technicians have been using information provided by the OBD system to diagnose and repair emissions problems since the mid-1990s.

The OBD system is a computerized network built into new vehicles that monitors and reports problems in real-time in a vehicle's pollution control equipment. The OBD system alerts motorists by turning on a dashboard warning light and storing fault codes and engine operating conditions that repair technicians can access to diagnose and repair the vehicle. The OBD system consists of:

- The Powertrain Control Module (PCM), a computer that monitors the emissions control systems,

- Emissions control components, systems and sensors,
- A dashboard warning light used to advise motorists of actual or impending emissions control problems, and a connector used to interrogate the vehicle's PCM.

Beginning in July 2002, the VEIP will begin inspecting OBD systems on 1996 and newer light duty vehicles weighing less than or equal to 8,500 pounds. The process will replace dynamometer testing for these vehicles. The OBD test consists of two steps: First the lane inspector will look to see if the check engine light on the dashboard is working. This is important because the dashboard light is the only way the vehicle's computer can alert the driver to a problem. If the dashboard warning light is not working, the vehicle will fail the VEIP test.

The second step consists of an electronic examination of the OBD computer itself. The lane inspector will connect a computer cable to the vehicle through a connector under the dashboard. This will allow the OBD system to report the operational status of the emissions control systems and any problems it found. If the OBD system reports conditions that would result in elevated emissions levels, the vehicle will fail the VEIP test. The entire process will only take a few minutes.

*Additional information will be provided to repair professionals before the start of OBD testing in the VEIP. To learn more about OBD testing and clean air, please call the Maryland Department of the Environment at 1-800 633-6101 extension 3270 (toll-free in Maryland) or 410 631-3270.*

# Just a Reminder!

Revised IM240 standards went into effect in January 2002.  
 The idle test standards have not changed.  
 The standards chart is also available on our web site at  
[www.mde.state.md.us/arma/Veip/veiphome.html](http://www.mde.state.md.us/arma/Veip/veiphome.html).  
 Page down until you find Revised IM240 Emissions  
 Standards and double click on it.

	Model Years	Emissions Standards (gpm)		
		HC	CO	NOx
<b>Light Duty Gasoline Vehicles</b> Passenger Vehicles	84-87	1.8	30	2.8
	88-90	1.7	30	2.7
	91-95	1.1	20	2.3
	96+	0.7	15	1.8
<b>Light Duty Gasoline Trucks 1</b> LDGT1 - Class 1 Trucks (0-6,000 lbs GVWR)	84-87	2.8	80	5.8
	88-90	2.8	80	3.2
	91-95	2.2	60	2.8
	96+ ≤ 3,750 LVW	0.7	15	1.8
	96+ > 3,750 LVW	0.9	20	2.3
<b>Light Duty Gasoline Trucks 2</b> LDGT2 - Class 2 Trucks (6,001-8,500 lbs GVWR)	84-87	2.9	80	6.6
	88-90	2.8	80	4.6
	91-95	2.2	60	4.2
	96+ ≤ 5,750 LVW	0.9	20	2.3
	96+ > 5,750 LVW	2.0	60	3.5
<b>Heavy Duty Gasoline Trucks 1</b> HDGT1 – Class 2A Trucks (8,501-9,999 lbs GVWR)	84	5.8	100	7.7
	85-86	4.7	80	7.7
	87	3.0	80	7.7
	88-90	2.9	80	7.5
	91-97	2.7	60	5.7
	98+	2.3	60	4.0

**Loaded Vehicle Weight (LVW)** equals the curb weight plus 300 lbs.  
 LVW is the weight used during federal certification.

- For 1996+ vehicles, the LVW criteria of 3,750 lbs applies only to LDGT1.
- For 1996+ vehicles, the LVW criteria of 5,750 lbs applies only to LDGT2.
- All Trucks weighing from 8,501 to 9,999 lbs GVWR should be tested as HDGT1.

## VEIP Initial Tests For January, February and March 2002

Total Initial Tests (includes both IM240 and Idle Tests)	308,611
Pass	286,590
Fail	22,021

# The Master Certified Emissions Technician (MCET) Survey - Thank you for your input!

Last fall we asked our MCETs to respond to a survey. We were primarily interested in how to better communicate with repair professionals and learned that many of you use computers to assist in vehicle repairs.

We also wanted to learn about your experience with OBDII technology. This summer, we will begin mandatory pass/fail OBD testing as part of the VEIP (See page 1 article). Many of you responded that you are already using this technology to repair 1996 and newer vehicles.

Most of you are looking at your customers' gas caps and suggesting replacement, presumably as a repair for evaporative emissions.

Please contact us if there are other issues you would like to make us aware of.

109 technicians took part in the Maryland Certified Emissions Technicians (MCET) survey. This is what they said:

71% use computers to assist in vehicle repairs.

## OBD II

- 41% felt they had expert knowledge of OBD.
- 54% felt they had fair knowledge of OBD.
- 76% use scan tool to repair 1996 and newer vehicles.

## Gas Cap

- 66% check for the presence of the gas cap.
- 17% check gas cap integrity.
- 76% suggest replacement of the gas cap to the customer.

56% use gas analyzers to diagnose VEIP failures.

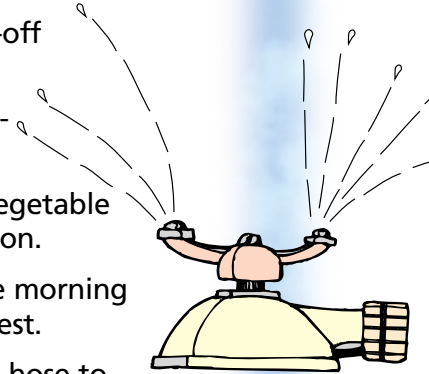
54% of technicians indicated that they would attend Saturday training sessions, but night seems to be the best time for training sessions.

# Water Conservation

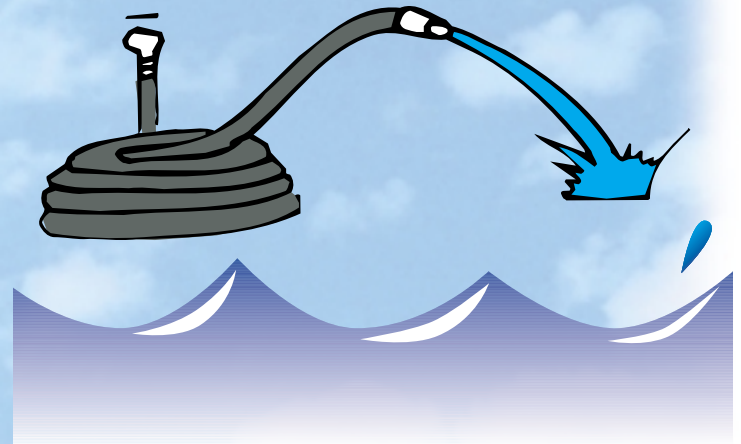
*It's not just for droughts.*

**Sound water practices are important all the time. Do your part to conserve water all year.**

- Repair leaky faucets, toilets or pipes.
- Replace conventional faucets and showerheads with water-efficient ones.
- Install an automatic shut-off nozzle on your hose.
- Landscape using drought-tolerant plants.
- Mulch your flower and vegetable beds to reduce evaporation.
- Water your garden in the morning when evaporation is lowest.
- Use a broom instead of a hose to clean sidewalks, decks, and other hard surfaces.



More information is available on our web site at [www.mde.state.md.us/waterconservation](http://www.mde.state.md.us/waterconservation)



## Check Us Out on the Web

**A**s part of an on-going effort to improve customer service and communications, we've redesigned our web site. In addition to providing Vehicle Emissions Inspection Program (VEIP) information, the web site now offers information on training opportunities for vehicle repair technicians, ideas for voluntarily reducing individual air pollution contributions, and information on Maryland's overall air quality.

The most obvious change is the organization of information according to interest or content. For example, all the information of interest to the repair community has been grouped in a section marked "Repair Industry." Similarly, information on the vehicle emissions inspection test for motorists has been grouped in a separate section. This new

organization significantly reduces your navigation time and helps to ensure that you locate the information that you are seeking.

Other changes include access to applications for certification as a Master Certified Emissions Technician or Certified Emissions Repair Facility and access to our newest publication—Clean Air Courier.

As always, we are interested in your comments and suggestions. If there is specific information that you would like to see added to our web site, please let us know. Our goal is to create a web site that is current, informative, and frequently used.

You can find us at

[www.mde.state.md.us/environment/air/veip/index.html](http://www.mde.state.md.us/environment/air/veip/index.html)

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Clean Air Courier is a new publication for Maryland motorists, repair professionals and everyone else.

Clean Air Courier includes: Expanded coverage of mobile sources topics, VEIP updates, Diesel News, Fuel News, Policy updates and more . . .

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