# **Vehicle Emissions Fact Sheet**

#### MOBILE SOURCE EMISSION FACTS

Ten percent of all vehicles cause 90% of the mobile-source pollution.

Cheaters tamper with their cars. About 10% of all vehicles have some form of tampering, but over 40% of gross emitters have been tampered with.

It's not only the old cars that cause pollution. Both new and old cars can be gross emitters. Only timely maintenance prevents one from attaining the "status" of a gross emitter. New car technology, while helpful, is expensive and will malfunction over time.

Rapid detection of patterns can save money and prevent further pollution. Systematic high failure rates for a specific make/model indicate a design or production flaw. Systematic high failure rates in a geographic area could indicate catalytic converter failure, possibly caused by leaded gas being sold as unleaded. Early detection of either problem can save resources for both consumers and industry while minimizing pollution.

#### CONTROL STRATEGY FACTS

Repairing malfunctioning vehicles is the best solution because they are the greatest vehicle emission problem. Regardless of a vehicle's age or its emission control technology, if all vehicles were in good working order, mobile pollution would not be a concern. Even partial success in this direction will enhance air quality.

Maintenance of your vehicle is critical in keeping emissions down. Regardless of test method used, substantial reductions in emissions can only be achieved with proper, timely maintenance.

Earlier detection prevents more pollution. Because vehicle malfunctions happen on an unpredictable timetable, remote sensing will identify those vehicles sooner than a regular drive-in I/M program would.

Competent diagnostic service and repair is the key to proper maintenance. People are more likely to have tests and repairs done when they have faith that the money they spend will: A) indicate a problem, and B) actually fix the problem. Programs that dictate where the tests and repairs are performed do not allow this to happen.

Money spent on gross emitters delivers the greatest "bang for the buck." The enormous contribution to emissions by these vehicles makes their repair or removal the most efficent use of emission control resources. Repairing one is a lot cheaper than buying a new vehicle, and the emissions of the repaired vehicle will not be that much more "dirty" than a new one.

Remote sensing can be used to evaluate progress. Changes over time in remote sensing measurements would be an accurate method of judging our success in reducing vehicle emissions.

## **VEHICLE EMISSIONS Q & A**

Even vehicles in good repair will produce high emissions for short periods of time, though their average emissions are low. Does this mean some owners will get a citation they don't deserve?

Monitoring locations can be selected to minimize the conditions that result in brief high emissions from otherwise clean cars. If a subsequent test indicates your car is okay, any charges should be dropped.

### Why not employ an I/M program for all vehicles on a regular basis to minimize the emissions from every vehicle?

Vehicles can become gross emitters at any time of the year and therefore can be identifed and repaired faster with remote sensing than with the regular "test-everyone" approach. The cost of remote sensing is a lot less than an I/M program, and inconveniences only those motorists who have a problem with their vehicle.

Depending on driving habits or lifestyle, some vehicles may be subject to many on-road (remote) tests, while others would be seldom monitored. Is that fair?

Yes. Vehicles that travel more should get tested more often. Because they are operated more, they pollute more than those vehicles that experience less use, even if they are the same kind of vehicle with the same per-mile pollution rates. Note that the centralized test only checks a vehicle on a set schedule, regardless of how much it is driven.