

BRIEFING

FEBRUARY 2017

U.S. EPA recall program for light-duty vehicles and light-duty trucks

A recall program remains one of the most powerful tools to ensure that in-use vehicles remain in compliance. With many countries now thinking about the compliance and enforcement aspects of their standards, one relevant question is how to handle a recall once it is decided. The lessons and actions discussed in this review of the U.S. Environmental Protection Agency's (EPA's) recall program could assist other governments that wish to establish or improve their own recall programs.

This briefing reviews the structure of EPA's emission recall program for light-duty vehicles and trucks (LDV and LDT) and its effectiveness over time. The goal is to explain the recall authority, procedures, and coordination among offices in the EPA recall program. This briefing does not attempt to discuss data sources used by EPA to target vehicle classes in the Agency's compliance program that lead to recall decisions.

1 TYPES OF RECALLS

There are two basic scenarios that can lead to a manufacturer's recall and repair of motor vehicles that fail to meet EPA's emissions standards when driven in actual use:

1. The first, more common, scenario involves a manufacturer recalling their vehicles, either voluntarily or because EPA has issued a recall order based on its administrative authority under the Clean Air Act.

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2. The second scenario involves a manufacturer conducting a recall under court order, where the United States has filed an enforcement case in federal court because a manufacturer committed an act prohibited by the Clean Air Act. In this scenario, the federal court has authority to order a recall to remedy the environmental harm caused by the manufacturer.

2 EPA ADMINISTRATIVE AUTHORITY TO REQUIRE A RECALL

EPA has the authority to order a manufacturer to recall and repair motor vehicles if the Agency determines that a substantial number of the manufacturer's vehicles fail to meet their emissions standards in actual use, despite proper maintenance and use. This authority is provided in Section 207 of the Clean Air Act. If EPA issues an official recall order, the manufacturer must submit a recall plan for EPA approval and then must implement the approved plan. The manufacturer may contest the recall order by requesting an administrative hearing and may appeal any final recall decision in federal court. As discussed below, in most cases, the recall is handled informally without an official EPA recall order, with the manufacturer voluntarily conducting the recall.

A recall typically is based on evidence of an emissions problem developed in the defect reporting program or from emissions testing of in-use vehicles. This section reviews the procedures for implementation of recalls that are based on a formal administrative order, as well as voluntary recalls.

2.1 BACKGROUND

In the early years of the recall program, manufacturers routinely resisted recalls by raising as many legal issues as possible. Not every recall was contested to the extreme of seeking court review, but industry lawyers would raise as many arguments as possible questioning whether the in-use vehicles tested by EPA were properly maintained vehicles, whether the number of vehicles tested was statistically significant, and whether data indicating emission failures were accurate and gathered under rigorous adherence to all details of the test procedures specified in the regulations for official compliance testing. Over the years, as EPA in-use vehicle procurements and testing practices were refined, documented, and survived legal challenge, manufacturers found it less productive to contest recalls and a better business practice to implement internal practices to ensure good compliance and to more cooperatively, and often voluntarily, implement recalls. The potential cost of an EPA-ordered recall, or as discussed later, an EPA enforcement case, acts as a deterrent to noncompliance and leads manufacturers to design better systems, establish good internal practices, and voluntarily recall vehicles when problems arise. These practices help manufacturers manage the risk of high future costs for vehicle noncompliance.

EPA's recall regulations prescribe a detailed process for how recalls may be "ordered," the manufacturers' response requirements, and the procedures to be followed should the manufacturer seek review and perhaps eventually challenge a recall in court. Although these regulatory provisions are outlined here, it is important to note that most of these formal provisions have not been used, at least for the light-duty (LD) vehicle/truck sector, for many years. EPA's reported summary data on recall history

indicates that an ordered recall for the LD sector has not been issued since the late 1990s. All LD recalls since then have either been what EPA calls “influenced recalls” or “voluntary recalls,” with the majority being voluntary recalls.

EPA reported this recall history in its 2008 Progress Report on Vehicle and Engine Compliance Activities¹. Figure 1 illustrates the evolution of the recall program, from the early days of resistance to recalls, to more recent experience where nearly all recalls have been voluntary.² This figure reports on numbers of vehicles recalled rather than number of recalls, but it illustrates that a significant portion of recalls during the 1970s and early 1980s were “ordered recalls.”³ The situation evolved to where the majority of recalls in the late 1980s through the mid-1990s were typically “influenced recalls,”⁴ and more recently from the late 1990s onward were mostly “voluntary recalls.”⁵

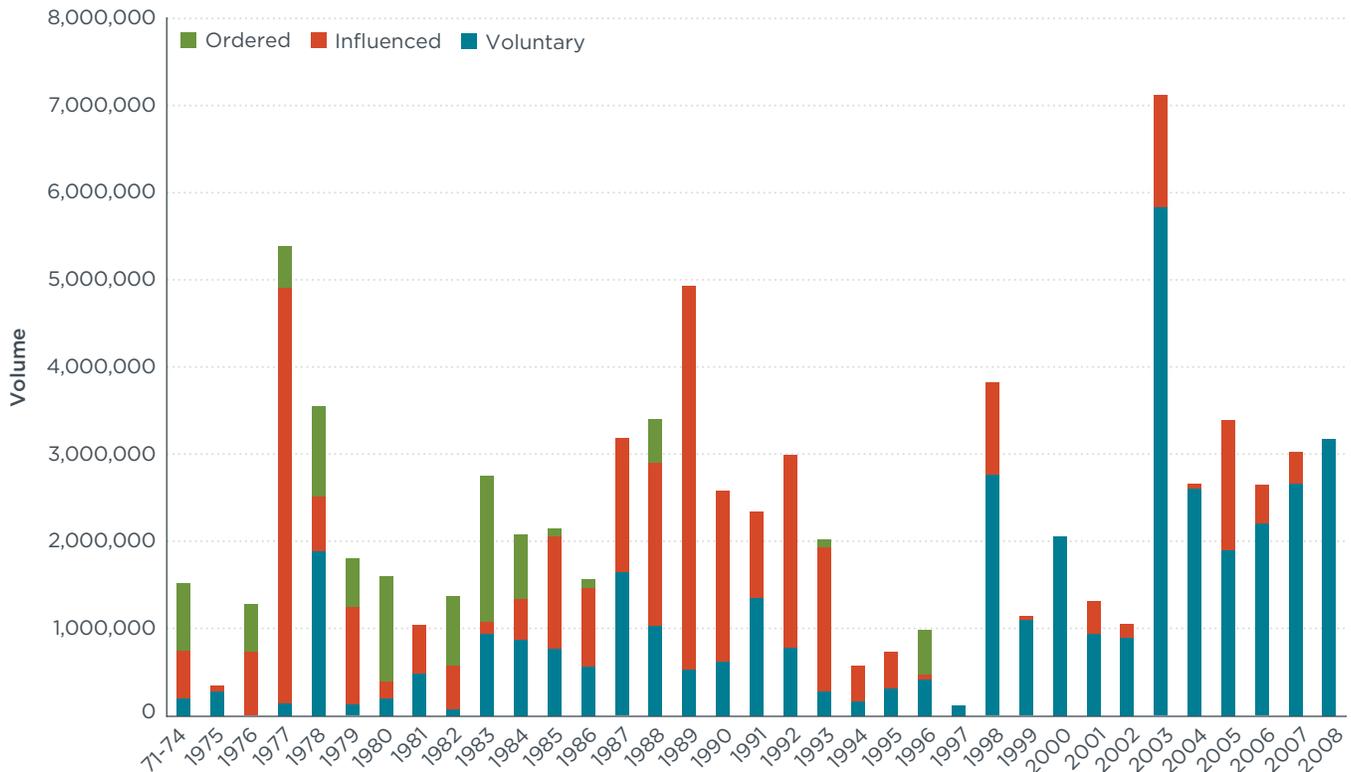


Figure 1. Historical Car and Light-Duty Truck Recall Volumes by Calendar Year
 Source: EPA (<https://nepis.epa.gov/Exe/ZyPDF.cgi/P1008K2D.PDF?Dockey=P1008K2D.PDF>)

1 U.S. Environmental Protection Agency. (2010). 2008 Progress Report—Vehicle and engine compliance activities. Washington, D.C.: U.S. Environmental Protection Agency. Retrieved from <https://nepis.epa.gov/Exe/ZyPDF.cgi/P1008K2D.PDF?Dockey=P1008K2D.PDF>

2 Originally Figure 31 on p. 32 of the 2008 Progress Report.

3 An “ordered” recall would be one in which a formal notice of mandatory recall would be issued under authority to the Clean Air Act and EPA regulations for implementing such authority.

4 “Influenced” recalls were recalls that occurred under some threat that EPA might order a recall but where manufacturers then agreed to proceed with the recall without the need for an official “order” to be issued.

5 “Voluntary” recalls were ones where manufacturers agreed to proceed with a recall based largely on their own determination of a nonconformity based either on their own investigation of defect reporting or on in-use emission data performed by the manufacturer under the in-use verification testing and in-use confirmatory testing programs or perhaps based on early review of EPA data, which might form the basis of an influenced or ordered recall.

There can be a somewhat vague line of demarcation between what may have been reported as an influenced vs. voluntary recall. Essentially both are voluntary in that the manufacturer has agreed to perform the recall without being ordered or forced by EPA to do so. In the influenced case, EPA would have taken a stronger role in encouraging the manufacturer to take action. Such influential action might include a written, but still informal, notice of a tentative finding of nonconformity. Or it might be an even less formal discussion of available data and the need for the manufacturer to take action. If, after all informal communications have failed to result in the manufacturer agreeing to proceed with a recall, and assuming EPA still believes a nonconformity exists in a substantial number of vehicles after hearing the manufacturer's informal input on the issues, EPA would then proceed with a formal notice of an ordered recall as prescribed in the regulations.

EPA's Compliance Activity Reports for later model years can be found at EPA's website⁶.

2.2 CLEAN AIR ACT REQUIREMENTS FOR RECALL

Section 207 of the Clean Air Act, entitled "Compliance by Vehicles and Engines in Actual Use," prescribes manufacturers' responsibilities to design, build, and equip vehicles to conform at the time of sale with applicable emission standards for the established useful life and to warrant that the vehicle is free from defects under the warranty periods specified by the Act. It also authorizes EPA to order a recall under certain conditions.

Section 207(c) requires the following key steps to recall:

- (a) If EPA determines that a "substantial number" of any class or category of vehicles does not conform to the standards when in actual use throughout their useful life, it shall notify the manufacturer.
- (b) The determination of nonconformity concerns properly maintained and used vehicles⁷. Requirements for proper maintenance and use must be furnished by the manufacturer, with the sale of the vehicle subject to regulations established by EPA.
- (c) The manufacturer shall be required to submit a plan for remedying the nonconformity.
- (d) The nonconformity of any vehicles that are properly maintained and used shall be remedied at the expense of the manufacturer.
- (e) If the manufacturer disagrees with the finding and so notifies EPA, the manufacturer shall be given the opportunity to contest EPA's determination at a public administrative hearing.
- (f) If the hearing does not result in withdrawal of the finding by EPA, the manufacturer is required to proceed with notification of dealers, ultimate

⁶ <https://www.epa.gov/vehicle-and-engine-certification/compliance-activity-reports-vehicles-and-engines>

⁷ The determination must be whether properly maintained and used vehicles comply, but technically EPA could base that on any relevant information, even information from a vehicle that was not properly maintained (e.g., if EPA could reliably conclude that the vehicle would fail even if properly maintained). However, this is a more difficult evidentiary burden to meet, so EPA avoids it, in part to avoid fighting over this issue. However, that is a practical problem, not a legal barrier.

purchasers, and subsequent purchasers in a manner prescribed by EPA regulations.

- (g) Manufacturers retain the right to seek judicial review in federal court.

2.3 EPA RECALL REGULATIONS

The EPA recall regulations for the LD sector appear in 40 CFR Part 85 Subpart S (i.e., the 85.1800 series). The regulations prescribe the details as necessary to implement the Clean Air Act provisions. These are the procedures required for an ordered recall. The steps in the regulations closely follow those steps outlined in the Clean Air Act.

- (a) Per Section 85.1802, EPA must officially notify the manufacturer of the determination that a substantial number of vehicles, although properly maintained, do not conform to regulatory requirements prescribed under Section 202 of the Clean Air Act. The notice shall contain a description of the class or category of vehicles involved and provide the factual basis for the determination.
- (b) The notice shall contain a date by which the manufacturer is required to submit a remedial plan unless the manufacturer requests a hearing. This date shall not be sooner than 45 days.
- (c) The manufacturer has the right to request a public administrative hearing to contest the recall. If a hearing is requested, the manufacturer is required to submit a remedial plan within 30 days of completion of the hearing unless EPA withdraws the order in response to the hearing.
- (d) Per Section 85.1803, the remedial plan shall contain the following, which shall then be subject to EPA approval:
 - » A description of the class of vehicles being recalled and a description of the fix or repair to be made.
 - » A description of methods the manufacturer will use to determine the names and addresses of vehicle owners (generally this will involve use of registration lists available from states or sometimes from commercial sources).
 - » A description of conditional proper maintenance, if any, plus rationale for applying any such conditions, which should have been performed to qualify the vehicle for repair at the manufacturer's expense.
 - » A description of procedures for the vehicle owner to follow in seeking the repair.
 - » Copies of the notification letter to be sent to vehicle owners.
 - » A description of impact of the repair on fuel economy, driveability, and safety of the affected vehicles plus a summary of data and studies supporting the conclusions.
- (e) Per Section 85.1804, the manufacturer shall begin notifying owners within 15 working days of the receipt of EPA's approval of the plan unless the schedule has been revised because of a request for a public hearing. Section 85.1805 contains the requirements for what should be included in the notification to owners.
- (f) Per Section 85.1806, the manufacturer must submit quarterly reports for six consecutive quarters (or fewer quarters if all vehicles are repaired earlier),

including information that will allow EPA to determine the adequacy of the recall campaign (i.e., number of vehicles involved; cumulative number inspected and repaired; number of vehicles not available to be repaired, for example because of scrappage; and number of vehicles, if any, determined to be ineligible for repair).

- (g) Section 85.1807 establishes the procedures for scheduling and conduct of a public hearing should one be requested.
 - » The presiding officer shall be an administrative law judge (ALJ) appointed pursuant to 5 U.S.C. Section 3105.
 - » The process provides procedures for appeals of a decision by the ALJ to EPA’s Environmental Appeals Board (EAB) with authority delegated by the Administrator to issue final appeals decisions.
- (h) If the EPA recall order has been upheld and is not withdrawn by the agency, upon conclusion of the public administrative hearing, and if necessary upon conclusion of the internal EPA appeals process, the manufacturer retains the right to seek judicial review in a federal court.

2.4 EMISSION-RELATED MAINTENANCE REGULATIONS

40 CFR 86.1834-01 establishes “allowable maintenance,” which the Administrator approves as reasonable and necessary. This section specifies emission-related maintenance for the purposes of obtaining durability data during the new vehicle certification process as well as what may be included in maintenance instructions furnished to purchasers of new motor vehicles. These requirements then form the basis for which in-use vehicles would be considered to be properly maintained vehicles and hence subject to recall if they are found to be failing emission standards. 40 CFR 86.1808-01 contains requirements for “maintenance instructions” (i.e., how and which maintenance instructions, consistent with Section 86.1834, shall be conveyed to dealers and vehicle purchasers).

2.5 REQUIREMENTS APPLICABLE TO VOLUNTARY RECALLS

The regulations prescribe the steps applicable for an ordered recall. As discussed above, nearly all recalls since the late 1990s for the LD sector have been voluntary—either totally voluntary by the manufacturer or influenced by EPA but still with the manufacturer volunteering to perform the recall without the need for EPA to start the formal ordered recall process. Given the voluntary nature of such recalls, most of the requirements of the regulations would not be applicable; however, EPA holds the manufacturer to the requirements for submitting a recall plan and for complying with recall reporting requirements (including submission of quarterly reports for six consecutive quarters, or a shorter period if all eligible vehicles have been repaired in a shorter amount of time), even if the recall is a voluntary recall.

2.6 ROLE OF VARIOUS EPA OFFICES IN ADMINISTRATIVE RECALL ISSUES

EPA’s Office of Transportation and Air Quality (OTAQ) implements essentially all aspects of the routine recall program. This includes performing and overseeing in-use testing requirements and taking the actions that lead to determination

of whether a substantial number of properly maintained and used vehicles are noncompliant, issuance of a recall order upon such a determination⁸, and approval of the manufacturer's remedial plan. OTAQ also oversees manufacturer implementation of voluntary recalls. EPA has significant discretion in deciding whether to make the formal determination of noncompliance that triggers a recall order under Section 207(c) of the Clean Air Act. This discretion allows the use of voluntary manufacturer recalls in appropriate circumstances. In addition, EPA has recognized that there may be cases where a recall would be highly impractical to implement and therefore ineffective in addressing the emissions problems. For example, EPA recognized that for certain kinds of nonroad equipment, it would likely be impossible to properly identify the owners of the off-highway equipment, and it would be highly questionable whether those owners would respond to an emission-related recall notice. EPA announced that in such cases, it intended to allow manufacturers to nominate alternative remedial measures to address potential non-compliance situations for review and evaluation by EPA. EPA expected that, if successfully implemented, the use of appropriate alternatives should obviate the need for the Agency to make a formal determination of substantial nonconformity (see 64 FR 15208, 15219-20; March 30, 1999; Final Phase 2 Emission Standards for New Nonroad Spark-Ignition Nonhandheld Engines At or Below 19 Kilowatts). OTAQ would have the lead in implementing this exercise of discretion, whether for highway or nonroad vehicles and engines.

As discussed in the next section, EPA's Office of Enforcement and Compliance Assurance (OECA) may become involved and may take over the case if the recall situation arises from or is linked to a manufacturer's commission of specific acts prohibited under the Clean Air Act. OECA would become involved if the emissions noncompliance was linked to suspected improprieties, such as failing to sell vehicles as described in the application for certification, implementation of defeat devices, submission of false information to the government, vehicle tampering, or other overt violations of Clean Air Act requirements, and/or any situations where either criminal or civil penalties might be applicable.

EPA's Office of Administrative Law Judges (OALJ) within the Office of Administration and Resources Management (OARM) would oversee the conduct of a public hearing should one be requested and would make a decision on the lawfulness of the administrative recall order, subject to an appeal to the EAB or the Administrator.

All offices would coordinate with and seek guidance from the Office of General Counsel (OGC) on legal matters as necessary. OGC is also the lead EPA office in working with the Department of Justice (DOJ) to defend EPA if a manufacturer sues EPA over a final recall decision.

2.7 MECHANISMS TO ENSURE THAT CONSUMERS SEEK RECALL REPAIRS

- (a) Recall reporting requirements represent EPA's primary assurance that recalls are being carried out effectively, and they allow EPA to take follow-up action should response rates be inadequate.
 - » EPA does not routinely spend a lot of resources monitoring recall response rates reported in quarterly reports; however, the reports are filed and are

⁸ The formal determination and issuance of a recall order would be made by the Administrator or the person delegated this authority by the Administrator.

available for spot checking and follow-up analysis as necessary.

- » EPA can perform spot checking (or “auditing”) on a random basis, or under the more likely scenario, it can investigate potential improprieties or inadequacy of manufacturer follow-through activities. This would happen should complaints arise from sources such as various consumer-awareness organizations or receipt of complaints by consumers who might become frustrated if repairs cannot be completed in a timely fashion (perhaps because of inadequate supply of repair parts or inadequate dealer knowledge or response).
- (b) Dealers have the incentive to follow up with customers to ensure that recall repairs are achieved, because they must be notified of recall requirements at the same time (if not sooner) that vehicle owners are notified and because dealers will be reimbursed by the manufacturer for parts and labor costs in completing recall repairs.
- (c) The Clean Air Act authorizes EPA to include requirements that the states must implement recall follow-up initiatives as part of inspection and maintenance (I/M) programs. Under such a program, a vehicle could be deemed as failing an I/M test if all outstanding emission-related recall repairs have not been made. However, this has never been implemented as a federally imposed requirement on I/M programs because individual states typically do not have practical recall follow-up information built into vehicle registration programs. Apparently only the state of California, which has its own independent recall program authority and reporting requirements, has such I/M-linked requirements for vehicle owners to obtain recall repairs.

3 COURT-ORDERED RECALL IN RESPONSE TO A MANUFACTURER’S UNLAWFUL ACTIONS

The Clean Air Act prohibits manufacturers of new motor vehicles from committing certain actions specified in Section 203 of the Clean Air Act. These prohibited acts include introducing new vehicles into commerce that are not covered by an EPA-issued certificate of conformity, or that contain devices that defeat the vehicle’s emissions control system.

If a manufacturer commits any of the prohibited acts, they are potentially liable for payment of a large civil penalty, based on the number of vehicles involved. The federal district courts have the authority to hear enforcement cases brought against a manufacturer for committing the prohibited act or actions. In these cases, DOJ files the lawsuit in the name of the United States against the manufacturer.

In some cases, the manufacturer’s prohibited actions are the reason the motor vehicles fail to comply with their emissions standards in actual use. For example, the emissions failure could be caused by a manufacturer’s failure to properly build the vehicle’s emission control system (typically called a “misbuild”), such that the certificate of conformity does not cover the vehicle. Or a manufacturer may unlawfully include a defeat device in the vehicle’s emissions control system. In these cases, the EPA typically would ask the court to order the manufacturer to recall the vehicles as part of the

enforcement case. Enforcement cases are typically settled by agreement of the parties, with the court entering an order that requires the manufacturer to recall the vehicles.

However, the majority of in-use emissions problems do not involve a manufacturer committing one of the prohibited acts. Instead, emissions problems are often caused by deterioration in the effectiveness of the vehicle emission control systems that is greater than predicted and planned for at the pre-production certification stage. This is the most common situation—noncompliance with the emission standards in use, but no actual prohibited action by the manufacturer. In these cases, the authority for a recall is EPA’s administrative authority under Section 207(c) of the Clean Air Act.

OTAQ has the lead in these more common situations. If evidence is developed raising issues of a prohibited act by the manufacturer, OTAQ coordinates with OECA, and OECA will decide whether to proceed with an enforcement lawsuit. In that case, OECA takes the lead and makes any appropriate referral to DOJ for filing an enforcement case in court. OTAQ provides technical and strategic support for OECA and DOJ in any enforcement action. OGC provides legal support, as needed, for administrative recall situations as well as enforcement cases in federal court.

Although enforcement cases in federal court are not as common, they do occur and can involve a large number of motor vehicles. In these cases, there is the potential for large civil penalties and the likelihood of great expense for a recall and other remedial actions.⁹

4 SUMMARY AND CONCLUSIONS

An effectively implemented recall program, backed by credible and defensible in-use testing and data acquisition programs, provides manufacturers with the incentive to ensure that vehicles are truly designed and built to conform with emission standards in actual consumer use.

A robust administrative recall program provides a necessary incentive for manufacturers to design and build their vehicles with the kind of emissions control systems that adequately account for real-world driving conditions over the life of the vehicle. Manufacturers must spend resources whenever they recall and repair vehicles, whether ordered or voluntary, and the risk of incurring this expense leads manufacturers to try to reduce and manage this business cost. This is somewhat like the incentive a manufacturer has to manage repair costs under their vehicle warranty. A strong and credible administrative recall program, based on adequate oversight of in-use compliance levels, is a critical tool to push manufacturers to proactively address the most common causes of in-use emissions noncompliance.

A strong enforcement program also provides an important incentive for manufacturers to avoid committing acts prohibited by the Clean Air Act, such as building defeat devices into their emissions control system. For example, the threat of an effective enforcement program can deter a manufacturer from achieving a vehicle performance objective at the expense of emissions control. Although unlawful actions such as the

9 Further information on EPA’s enforcement actions concerning motor vehicles can be found at <https://www.epa.gov/enforcement/clean-air-act-vehicle-and-engine-enforcement-case-resolutions> and <https://cfpub.epa.gov/enforcement/cases>.

use of defeat devices happen relatively infrequently, they can cause large increases in real-world emissions. EPA's enforcement program, with the risk of large civil penalties and costly court-ordered recalls, reduces the likelihood of these less frequent but important causes of in-use noncompliance.

Robust and credible administrative and enforcement programs discourage manufacturers from viewing pre-production certification requirements as simply a game to be played to allow vehicles to be sold without proper attention to ensuring in-use compliance. As this condition is achieved, simplification or even elimination of certain other early compliance program requirements can potentially occur. In the United States, this has allowed EPA to reduce some of the requirements and burdens in the certification program and has allowed EPA to stop "routine" conduct of its Selective Enforcement Audit (SEA) program¹⁰ applicable to the LD sector.

¹⁰ The SEA program is EPA's end-of-line production audit testing program. The SEA regulations have been retained on the books, but with the addition of the in-use verification program (IUVP), which requires manufacturers to routinely test in-use vehicles at their own expense, EPA has basically suspended routine SEA testing for the LD sector as long as in-use compliance rates observed via in-use testing programs remain acceptable.