July 30, 2014

Alberto Ayala
Air Resources Board
1001 "I" Street P.O. Box 2815
Sacramento, CA 95812

Dear Mr. Ayala:

The purpose of this letter is to memorialize an agreement between the Air Resources Board (ARB) and the Bureau of Automotive Repair (BAR) regarding the analysis of the program changes mandated by AB 2289 (Eng., Chapter 258). Although BAR has adopted regulations to implement the Smog Check program improvements, many of the provisions of the new law could not be implemented until January 2013.

AB 2289, specifically Health and Safety Code section 44024.5, requires the Bureau of Automotive Repair (BAR), in cooperation with the Air Resources Board (ARB), to perform an analysis of the Smog Check program improvements made under AB 2289 using data collected from on-road inspections and statewide vehicle inspections. The results are to be reported publically annually, beginning July 1, 2011. During legislative committee reviews of AB 2289, amendments were made to delay the start dates of the legislation's key provisions to 2013. Unfortunately, the annual reporting requirement was not amended consistent with these changes.

As such, this report, like the 2012 and 2013 Smog Check Performance Reports', cannot include a complete analysis of the effectiveness of the AB 2289 improvements. However, a preliminary analysis based upon available data is included for the program improvements implemented as of January 1, 2013. Similar to the prior reports, this report provides a summary of the major provisions of AB 2289 and the implementation status of these changes.

BAR plans to present the annual report again this year at the upcoming public meeting of the Bureau Advisory Group on October 14, 2014. The 2014 Smog Check Performance Report will also be made available to the public on BAR’s Web site at www.smogcheck.ca.gov.

Sincerely,

Patrick Dorais, Chief
Bureau of Automotive Repair

cc: Dennis Hayes, Deputy Chief
David Lewis, Air Pollution Specialist
Introduction

The enactment of AB 2289 (Eng, Chapter 258, Statutes of 2010) marked the first major update to the Smog Check Program since the mid-1990s. The law, which has many provisions that could not legally be implemented until January 2013, was a comprehensive effort to modernize California’s vehicle emissions inspection and maintenance program. It was in direct response to a March 12, 2009 report by Sierra Research, indicating 49% of 1976 - 1995 model year vehicles that previously failed their initial Smog Check inspection, passed a retest and were certified, failed again on the roadside within a year of the passing test. The improvements the law requires were made possible by advancements in vehicle technology, and enhanced resources to produce and analyze data from Smog Check inspection results.

Health and Safety Code (HSC) section 44024.5, as amended by AB 2289, requires the Bureau of Automotive Repair (BAR), in cooperation with the Air Resources Board (ARB), to perform an analysis of the Smog Check program performance improvements using data collected from inspections performed by Smog Check stations and on-road inspections conducted by BAR. The law required results to be reported annually, beginning July 1, 2011.

During legislative committee reviews of AB 2289, amendments were made to delay the start date of the legislation’s key provisions until after January 2013. However, no corresponding delay was made to the annual reporting requirement. As such, this report, like the 2012 and 2013 Smog Check Performance Report, does not include a complete analysis of the effectiveness of the AB 2289 improvements. Only a preliminary analysis based upon available data is included for the program improvements implemented as of January 1, 2013. Similar to the 2012 and 2013 reports, this report provides a summary of the major provisions of AB 2289 and the implementation status of these changes. A complete biennial cycle of post implementation data to evaluate the impact of the new improvements will not be available for reporting until the 2015 Smog Check Performance Report.

In preparation for the 2015 report, BAR has five full-time roadside inspection teams collecting on-road inspection data. In part, the data collection is intended to monitor the rate at which vehicles fail an on-road inspection after having previously passed a station inspection. To be consistent with previous analyses, the re-fail methodology requires data from a full two-year Smog Check inspection cycle. Given the January 1, 2013 implementation date of the STAR Program, sufficient data to redo this analysis and estimate the post-implementation re-fail rate across time will not be available until January 1, 2015. A comparison of the on-road vehicle failure rate post-AB 2289 to the results from the Sierra Research study should determine the effectiveness of the implemented program improvements. As required by HSC section 44024.5 (b) (1), BAR obtained an independent validation of the re-fail methodology used in the Sierra Research report1. The independent review was completed by the University of California,

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Riverside College of Engineering - Center for Environmental Research and Technology (UCR, C-CERT) in May 2013.

**AB 2289 Implementation Status**

1. **Station Performance Standards**

HSC sections 44014.2 and 44014.5 required Test-Only and Test-and-Repair stations to meet inspection-based performance standards for the right to inspect likely high-emitting vehicles pursuant to HSC sections 44010.5 and 44014.5, respectively. Vehicles subject to these inspection requirements are commonly referred as “directed vehicles.”

BAR implemented the STAR Program on schedule on January 1, 2013. STAR established performance standards designed to incentivize the proper performance of Smog Check inspections. Under the STAR Program, stations interested in inspecting directed vehicles must apply for STAR certification. BAR will grant certification upon finding that the station meets various inspection-based performance standards based on each calendar quarter’s performance. In addition to the performance measures, stations must also be in compliance with the enforcement-related standards of the STAR Program. This includes a review of citations and/or administrative actions associated with the station and its technicians. Failure of STAR-certified stations to meet the performance standards may result in decertification from the STAR Program and termination of the right to inspect directed vehicles. STAR Program information as well as station and technician report cards may be viewed on BAR’s Web site, [www.smogcheck.ca.gov](http://www.smogcheck.ca.gov).

BAR continues to provide outreach materials and information to stations and consumers about the STAR Program. This includes Web-posted Q&A documents, newsletter articles, Department of Motor Vehicles (DMV) renewal notice information, and toll-free hotlines to answer consumer and industry questions about the STAR program.

**Preliminary Results:**

Program data collected prior to the implementation of the STAR Program was compared to data collected during the early months of both 2013 and 2014, after the program was in place. Although a complete post-implementation biennial cycle of data will not be available for analysis and reporting until July 2015, BAR has prepared a preliminary analysis of the post-implementation data. In particular, station participation in the STAR Program, which is voluntary, was examined by station type (Table 1). Statistics related to the enforcement of the STAR Program also are provided (Table 2). The analysis also includes changes to the Smog Check overall failure rate (Figures 1-6), and the duration of initial inspections (Figure 7). Finally,
several short-term performance measures are compared before and after STAR implementation (Figure 8).

A. **STAR Station Participation and Enforcement:**

Table 1 shows a distribution of the 6,684 active Smog Check stations by station type as of May 2014. Of the 6,864 active stations, 4,701 were Test and Repair stations and the remaining 2,163 were Test Only stations. About 60% of all active stations have applied and been accepted into the STAR Program as of this date.

<table>
<thead>
<tr>
<th>Applied and Accepted into STAR Program</th>
<th>Number of Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test and Repair</td>
<td>2,234</td>
</tr>
<tr>
<td>Test Only</td>
<td>1,856</td>
</tr>
<tr>
<td>Did Not Apply / Not Accepted into STAR Program</td>
<td>Number of Stations</td>
</tr>
<tr>
<td>Test and Repair</td>
<td>2,467</td>
</tr>
<tr>
<td>Test Only</td>
<td>307</td>
</tr>
<tr>
<td>Total</td>
<td>6,864</td>
</tr>
</tbody>
</table>

Program data is monitored quarterly to ensure stations continue to meet the STAR performance measures. Failure to meet the performance measures can lead to invalidation of a station’s STAR certification. BAR’s enforcement division processes the invalidations of STAR certification. When cause for invalidation is identified, BAR enforcement sends written notification of the cause for invalidation and the pending invalidation date to the station. Pursuant to regulations, STAR stations may request an informal review before the BAR Chief or its designee prior to invalidation. If the invalidation is upheld, the station may then request an administrative hearing on the matter. Table 2 summarizes the STAR invalidation statistics since program implementation on January 1, 2013.
Table 2: STAR Invalidation Statistics
As of May 2014

<table>
<thead>
<tr>
<th>Action</th>
<th>Short Term Performance Measures</th>
<th>Long Term Performance Measure</th>
<th>Disciplinary Actions</th>
<th>Citations Issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notification Letter Sent</td>
<td>457</td>
<td>234</td>
<td>23</td>
<td>130</td>
</tr>
<tr>
<td>Informal Appeal Requested</td>
<td>310</td>
<td>163</td>
<td>16</td>
<td>79</td>
</tr>
<tr>
<td>Invalidation Upheld</td>
<td>129</td>
<td>51</td>
<td>12</td>
<td>44</td>
</tr>
<tr>
<td>Invalidation Overturned</td>
<td>171</td>
<td>94</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>Administrative Appeal Requested</td>
<td>73</td>
<td>25</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Completed Invalidations</td>
<td>123</td>
<td>64</td>
<td>9</td>
<td>74</td>
</tr>
</tbody>
</table>

B. Overall Failure Rate Comparison by Model Year

Figure 1 shows a comparison of the Smog Check overall test failure rate by vehicle model year prior to implementation of the STAR Program on January 1, 2013, and during the early months of 2013 and 2014.

Figure 1: Smog Check Overall Test Failure Rate
1 Before and After Implementation of STAR Program

Since the STAR Program was implemented on January 1, 2013, the available post-implementation program data was not a full two-year inspection cycle. However, a comparison was made using the first 5 months following implementation of the program on January 1, 2013, and the first 5 months of 2014. For the 2013 time period, there was a trend showing a higher post-implementation failure rate for older model-year vehicles (1976-1998). For the 2014 time period, the trend is still present, but not to the extent seen immediately following implementation of the STAR Program. This increased failure rate is an expected byproduct of improved inspection quality. For years, random roadside inspections conducted by BAR program representatives have shown a failure rate for 1976-1999 model-year vehicles that is approximately 1.5 to 2.0 times the failure rate seen in the Smog Check Program.

A number of factors could potentially be contributing to the slight reduction in the failure rate from 2013 to 2014. One factor is likely due to licensed Smog Check inspectors (Inspectors) becoming more familiar with the STAR Program. When a program is first introduced, inspectors tend to adhere to rules closely. Experience indicates that technicians tend to relax their procedures somewhat as they become comfortable with changes to the program.

C. Failure Rate Comparison by Test Component

There are three elements to the Smog Check inspection: a tailpipe emissions test, a visual inspection of required emissions control components and a functional check of certain emissions control systems. Figures 2-4 show a breakdown by component of the overall Smog Check failure rate shown in Figure 1. For all three elements of the Smog Check inspection, the failure rate immediately after implementation of STAR exceeds the before implementation failure rate for older model-year vehicles. The most significant change was observed for the functional check failure rate. One might infer that Inspectors are performing a more thorough inspection of older vehicles since the implementation of the STAR Program. In the 2\textsuperscript{nd} year following STAR implementation, both the visual and functional failure rates of the Smog Check inspection exceed the failure rates before STAR for older model-year vehicles. As shown in Figures 3 and 4, these failure rates were slightly less than the 1\textsuperscript{st} year failure rates observed. Figure 2 shows the tailpipe failure rate in 2\textsuperscript{nd} year following STAR implementation actually dropped below the rate prior to STAR implementation for some older vehicle model years.
2014 Smog Check Performance Report

Figure 2: Smog Check Emissions Test Failure Rate¹
Before and After Implementation of STAR Program

Before STAR Implementation 1st Year After STAR Implementation 2nd Year After STAR Implementation

Vehicle Model Year

Figure 3: Smog Check Functional Check Failure Rate¹
Before and After Implementation of STAR Program

Before STAR Implementation 1st Year After STAR Implementation 2nd Year After STAR Implementation

Vehicle Model Year

Figure 4: Smog Check Visual Inspection Failure Rate¹
Before and After Implementation of STAR Program

Before STAR Implementation 1st Year After STAR Implementation 2nd Year After STAR Implementation

Vehicle Model Year

D. Failure Rate Comparison for Directed Vehicles

A detailed look at directed vehicles is shown in Figure 5. In 2013, all gasoline-powered vehicles model-years 1976 to 2005 were eligible for direction. Currently, in 2014, all gasoline-powered vehicles model-years 1976 - 2006 are eligible for direction. The 1976 - 1995 model-year vehicles are partitioned out because they were specifically studied in the Sierra Research report. There was an increase in the overall failure rate from 20.6% to 23.9% for all directed vehicles immediately after implementation of the STAR Program. By comparison, an increase from 29.3% to 34.2% was observed for the older 1976 - 1995 directed vehicles. The increases to the overall failure rate observed immediately after the implementation appear to be dampening somewhat during the 2nd year.

A more detailed graph for the older model-year directed vehicles is shown in Figure 6. In addition to the overall Smog Check failure rate, Figure 6 also shows the failure rate for each component of the inspection. During the early months of the 1st and 2nd years following STAR implementation, both the visual and functional failure rates of the Smog Check inspection exceed the before STAR implementation failure rates for older model-year vehicles. However, the tailpipe emissions failure rate has decreased since the original increase observed immediately following implementation of STAR.
Figure 6 also shows the impact of several program changes such as the tightening of emission standards for older vehicles as well as the implementation of STAR, in which older vehicles are directed to have their inspections at higher performing stations.

Figures 5 and 6 showed a substantial jump in the initial test failure rate when the STAR Program was initially implemented in 2013. This may be due to the improved quality of inspections performed on vehicles that had been previously inspected by stations with minimal or no performance criteria. The latest analysis, performed in the 2nd year following implementation, indicates that the disparity in failure rates before versus after STAR implementation has narrowed, as discussed in section 1.
E. Inspection Duration Comparison for Directed Vehicles

The average test times were calculated for Smog Check initial inspections occurring prior to and during the first and second year after implementation of the STAR Program. Prior to implementation of the STAR Program, it was anticipated that improved inspection quality would result in longer inspection times as Inspectors were more careful while performing their inspections.

Figure 7 shows the average test times in minutes for all directed vehicles and for the older 1976-1995 directed vehicles. For all directed vehicles, a 2% increase to the average amount of time taken to perform a Smog Check inspection was observed immediately after the implementation of the STAR Program. Since implementation, the increase in the average inspection time has remained steady at about 1.5% for all directed vehicles. For the oldest vehicles, 1976-1995 model years, a 3% increase was observed immediately after implementation of the STAR Program. Since then, the average test time has remained relatively steady.

Figure 7: Smog Check Test Inspections Time\(^1\) for Directed Vehicles Before and After Implementation of STAR Program

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1. BAR-97 initial tests from January 2012 to May 2014.
F. Short-Term Measures Comparison

As discussed previously, a station’s overall STAR performance is based on a series of short-term performance measures and one long-term measure. The short-term STAR Program performance measures include: Test Deviations; Incorrect Gear Selection and Similar Vehicle Failure Rate (SVFR). Test Deviations are further divided into the following seven categories: (1) Fuel Cap Test Not Performed; (2) Fuel Evaporative Test Not Performed; (3) Timing Not Performed; (4) OBD II Not Performed; (5) Max Readiness Monitors; (6) ASM Restarts; and (7) Aborted Tests. Together, these nine inspection-based performance measures are considered short-term because they are calculated and analyzed based on data from the most recently completed calendar quarter.

Figure 8 compares three of the test deviation categories as well as the occurrence of incorrect gear selection by stations both prior to and following program implementation. For example, in 2012, there were 7,395 occurrences where stations indicated that a fuel cap pressure test could not be performed on a vehicle when at least 90% of the inspections performed on “similar vehicles” statewide indicated that the fuel cap was testable. The number of occurrences dropped to 5,731, a 22.5% decrease, in the first quarter of 2013 and dropped another 10.4% to 4,965 in the first quarter of 2014 for a total decrease of nearly 33% since implementation of the STAR Program.

Similarly, in Figure 8, a 47.2% decrease was observed in the number of occurrences where stations indicated that an evaporative test could not be performed on a vehicle when at least 90% of the inspections performed on “similar vehicles” statewide indicated that the fuel evaporative test could be completed. Similar to the inspection duration comparison, this result may reflect an improvement in the quality of inspections since implementation of the STAR Program.

The third test deviation shown in Figure 8 calculates the rate at which each station indicates that a vehicle’s timing is not adjustable, and therefore cannot be tested, when at least 90% of the inspections performed on “similar vehicles” statewide indicate that the ignition timing is testable. The number of stations not meeting the standard increased during the 1st quarter following program implementation, and then increased again during the 1st quarter of 2014. As stations become more careful in determining which vehicles need a timing test performed, technician consensus on vehicle testability should improve and reduce the number of stations failing to meet this performance measure.

Figure 8 also shows the number of stations that failed to meet the incorrect gear selection performance measure prior to and following program implementation. This STAR performance measure compares the rate at which vehicles tested by each station are shifted into the incorrect gear during an Acceleration Simulation Mode (ASM) inspection to the incorrect gear selection rates for “similar vehicles” statewide. Initially, there was a large improvement in the number of inspections tested in the wrong gear, as observed in the 1st quarter following STAR implementation. During the 1st quarter of 2014, additional improvement was observed.
2. Directed Vehicles

HSC section 44010.5 now includes a more detailed description of the types of vehicles to be included in the directed vehicle population. Directed vehicles have a higher than average probability of failing their next inspection and are identified by BAR for inspection and certification at a STAR station. In response to the statute changes, BAR designates the following vehicle groups as directed vehicles:

I. The first group includes all 1976 to 1999 model-year vehicles.

II. The second group includes vehicles with emissions-related problems that may not be adequately detected by the vehicle’s OBD II system. As these vehicles are jointly identified by BAR and ARB, they will be included in the directed vehicle population.

III. The third group includes any vehicles (e.g., 2000 to 2006 model-years) for which direction is necessary to meet the emissions reduction standards established by the United States Environmental Protection Agency (U.S. EPA).

If a vehicle requires its biennial Smog Check inspection to be performed at a STAR station, the vehicle owner will receive notification on the DMV registration renewal notice. (Note: vehicles failing their Smog Check inspection at “gross polluter” levels, as specified in HSC section 44014.5, also require certification at a STAR station). Motorists are encouraged to use BAR’s online station locator to assist them in finding STAR stations in their area.
Status: The inclusion of all 1976 to 1999 model-year vehicles in the directed vehicle population, and the requirement for all confirmed gross polluters to be inspected at a STAR station, were completed in January 2014.

3. Citation Process

Amendments to HSC sections 44050, 44052, and 44055 were made to expand BAR’s authority to issue citations for violations of the Smog Check Program. A citation may contain an order of abatement, which includes a training requirement, the assessment of an administrative fine, or both. The maximum administrative fine against Smog Check stations has been increased from $2,500 to $5,000 per vehicle inspection or repair. This provision also provides BAR new authority to cite and fine technicians up to $5,000, to require prescribed training, or both. Regulatory revisions specify fine ranges and establish a framework for determining these amounts.

In addition to an administrative hearing, the cited licensee may request an informal conference with the BAR Chief or its designee. Failure to pay a civil penalty or fine related to an effective citation is grounds for the denial of a license, or of the renewal of a license.

Status: The regulations providing the authority to issue administrative fines up to $5,000 and to issue administrative fines to technicians became effective on July 10, 2012. The amount of each administrative fine is based upon the factors defined by section 44050 (b) of the Health and Safety Code. Between January 1, 2014 and April 30, 2014 there were 171 citations issued to Smog Check stations with an average fine of $1,412. In addition, there were 48 citations issued to Smog Check technicians during the same time period with an average fine of $667. In addition to the fine amounts, 111 technicians were required to complete re-training as a result of a citation.

4. New Equipment

HSC section 44036 provides BAR the authority to adopt new Smog Check equipment specifications and require stations to use BAR-certified equipment to perform a Smog Check inspection. Under this authority, BAR developed specifications for a Data Acquisition Device (DAD), which will be the only BAR-certified component of the new OBD Inspection System (OIS) that will be required to perform OBD-focused inspections on newer model-year gasoline- and diesel-powered vehicles. The DAD specifications, as well as other required ancillary equipment of the OIS, are established in regulation. The OIS is designed to reduce fraud, with a special emphasis on curbing the practice of using one vehicle as a surrogate for testing another vehicle in order to circumvent a failing inspection result. The new OBD Inspection System will accomplish this objective by collecting more information during an OBD II inspection than is currently possible using the existing BAR-97 Emission Inspection System (EIS). This information

3 http://www.bar.ca.gov/80_BARResources/05_Legislative/RegulatoryActions/DADSpecification.pdf
can be used by BAR enforcement to identify inspection irregularities indicative of fraud when the data “fingerprint” of a surrogate vehicle does not match what was expected from a test vehicle.

When irregularities are detected, HSC section 44036, as amended by AB 2289, provides authority for real-time certificate blocking, where BAR can electronically intervene during a suspected fraudulent inspection to prevent the improper issuance of a Smog Check certificate. In these cases, BAR may require an inspection to be completed at another station, including the possibility of having that inspection performed at a state-contracted Referee facility.

HSC section 44036 also provides BAR the authority to allow stations the flexibility to tailor their Smog Check inspection equipment acquisitions to meet their inspection needs. Stations choosing to inspect only model-year 2000 and newer gasoline-powered vehicles or 1998 and newer diesel-powered vehicles may opt to purchase and maintain only the new OIS. Stations looking to inspect only older vehicles may simply maintain the BAR-97 EIS. STAR stations, the only stations allowed to inspect directed and gross-polluting vehicles, must maintain both types of equipment.

**Status:** As of July 1, 2014, OIS DAD equipment from two manufacturers has been certified for use. Two other manufacturers of the OIS DAD equipment are currently in the middle of certification testing. As each device is certified, stations may start using the equipment to perform OBD-focused inspections. Official rollout of the new OIS is anticipated in December 2014.

**Target Implementation Date:** December 2014 for statewide OIS required inspections on model-year 2000 and newer OBD II-equipped gasoline vehicles, and all 1998 and newer OBD II-equipped diesel vehicles.

5. Inspection Procedures and Standards

Amendments to HSC section 44012 allowed the adoption through regulation of inspection procedures based on the maturity of applicable vehicle technology. By model-year 2000, second generation On-Board Diagnostic systems (OBD II) present on most gasoline-powered vehicles were sufficiently developed to detect the vast majority of vehicle malfunctions that result in elevated tailpipe emissions. Accordingly, these vehicles can now be inspected quickly and efficiently using an OBD functional inspection in lieu of a tailpipe emissions inspection. Model-years 1996 through 1999 that are OBD II equipped will continue to receive the OBD II inspection in conjunction with the tailpipe test as is currently done. All OBD II equipped model-year vehicles will continue to receive a visual inspection of all required emissions control components. Other vehicles not equipped with OBD II systems will continue to receive a tailpipe emissions test.
To further improve the accuracy of the OBD II inspection, readiness monitor limits will be tightened in early 2015 to reduce the likelihood that vehicles could pass the OBD II inspection prior to running a complete diagnosis of the vehicle. Each self-diagnostic test required as part of the OBD II protocol is accompanied by a readiness monitor, which indicates when the applicable diagnostic test ran to completion. Prior to completion, the diagnostic test is unable to be performed, and thus not able to indicate whether there is a problem with a particular vehicle emission control system. Because some diagnostic tests are time-consuming to complete, Smog Check inspection procedures utilizing the OBD II system have historically allowed a vehicle to pass a Smog Check inspection while some self-diagnostic tests are incomplete. With this latest change, gasoline-powered vehicles model years 1996-1999, which were previously allowed up to two unset readiness monitors and still pass the inspection, will soon be allowed to pass the inspection with only one unset monitor. Model-year 2000 and newer gasoline-powered vehicles, which are currently allowed only one unset readiness monitor, will only be allowed to have the fuel evaporative system monitor incomplete and pass the inspection. The fuel evaporative system self-diagnostic test is typically the slowest monitor to set, unless there is a malfunction with another emission system, which is the reason for this allowance on these newer model-year vehicles.

Similarly, the number of allowed unset monitors for diesel-powered vehicles model-years 1998-2006 will decrease from one to zero. For 2007 and newer diesel vehicles, the limits decrease from one to only allow the exhaust after treatment system monitor to be unset and pass the inspection. These new readiness limits mirror the U.S. EPA guidelines that have been established for Inspection and Maintenance programs throughout the nation.

Status: Regulations containing revised inspection procedures and more stringent OBD readiness monitor requirements were adopted July 1, 2013. Statewide OBD-focused inspections will be fully implemented by the end of 2014, pending BAR equipment certification and station equipment purchases. After implementation begins, more stringent readiness limits will be implemented in early 2015.

Target Implementation Date: December 2014 for new OBD II-focused inspection program, and March 2015 for tightening of monitor readiness criteria.

6. Referee Network

HSC sections 44014 and 44017 delineate the types of vehicles that require a Referee inspection. The list includes vehicles for which the manufacturer’s design presents inspection incompatibilities (e.g., specially constructed vehicles), engine changes and vehicles equipped with emission control configurations that do not match configurations certified by the U.S. EPA or ARB (e.g., grey market vehicles imported into the country).
Status: Regulations defining the types of Referee services available to consumers were adopted July 1, 2013. There are 31 Referee facilities located at various community colleges throughout the state.

Program Revisions

- Repair Cost Waiver

Beginning July 1, 2013, the minimum expenditure necessary to be eligible for a repair cost waiver was increased from $450 to $650. HSC section 44017 (c) requires the department to periodically revise the repair cost limit in accordance with changes in the Consumer Price Index, as published by the United States Bureau of Labor Statistics.

A vehicle owner now may qualify for a repair cost waiver on a required biennial Smog Check if their vehicle fails to pass the inspection after having spent a minimum of $650 on Smog Check related repairs at a licensed Smog Check station. The repair cost waiver postpones the Smog Check certificate requirement for up to two years beginning on the due date of the next registration renewal for the vehicle. A vehicle that receives a waiver must be fully repaired by the next required biennial Smog Check inspection or upon transfer of title. Repair cost waivers are issued by a state-contracted Referee facility.

Figure 9 shows the small number of repair cost waivers issued since 2009. About 650,000 vehicles failed their initial Smog Check inspection during each of the 6-month time periods shown. The repair cost waivers issued represent less than 0.2% of the overall vehicle failures during each of these time periods.

![Figure 9: Repair Cost Waivers Issued Across Time](image)

Note: Approximately 650,000 vehicles fail their initial Smog Check during a given 6 month time period.
Status: Repair cost waiver increase implemented July 2013.

• Consumer Assistance Program

AB 787, Chapter 231, Statutes of 2010 made changes to the Consumer Assistance Program (CAP). Beginning in January 2011, eligibility for repair assistance from CAP was limited exclusively to income-eligible consumers. In addition, income-eligible consumers can now receive $1,500 to retire a vehicle under the CAP Vehicle Retirement (VR) Program. In 2012, BAR further limited the Repair Assistance (RA) Program such that it no longer covers maintenance-related repairs. As of July 1, 2012, BAR began requiring consumers participating in RA to pay the total cost of testing and diagnosing the emissions-related problems of a vehicle.

In July 2014, pursuant to SB 459, Chapter 437, Statutes of 2013, BAR modified regulations to the RA and VR eligibility requirements to permit participation of vehicle owners whose vehicle registration has lapsed not more than 120 days in the current registration cycle and in the previous two years preceding the current registration expiration date. Prior to that change, any lapse in registration prevented participation, which led to a sizeable number of motorists who needed assistance being ineligible.

Status: The regulation change allowing for VR and RA eligibility despite a lapse in registration, not to exceed 120 days, was approved by the Office of Administrative Law (OAL) and implemented by BAR on July 1, 2014.

• License-Restructure

Prior to 2012, licensed Smog Check Technicians were licensed to conduct both inspections and repairs. In 2012, BAR adopted regulations that allowed an individual to become licensed as an Inspector and/or a Repair Technician. The new licensing structure improves training requirements for the Inspector license, bolsters the qualification requirements for the Repair Technician license, and creates more comprehensive examinations for both licenses. The license restructure also provided more station licensing options that better align with the marketplace and industry. These options provide a streamlined path to licensure for both new car dealers and independent specialty shops.

Status: Regulations were adopted by OAL in February 2012. Implementation by BAR began in August 2012. As of July 1, 2014, the program has 76 current Repair Only stations and 99 current Repair Only technicians.

• License-Related Training

In August 2012, BAR updated the training program for Smog Check Repair Technicians and Inspectors. The new process transferred the responsibility for development of the update training course material from BAR personnel to instructors who are certified by BAR. In addition, all courses now must be approved by a group of Subject Matter Experts (SMEs) under
contract with BAR. Currently, there are 21 approved courses in use by BAR-certified schools with another five courses in various stages of the review and approval process.

In order to support the OBD Inspection System (OIS) that will be incorporated into the Smog Check program in December 2014, the BAR training unit developed a video-based training program that demonstrates the steps required to register an OIS-equipped station and download the OIS software for use in the new program. The training was published on BAR’s Web site and used by Smog Check stations during the certification process for the new Data Acquisition Devices.

BAR staff recently developed another course designed for Smog Check Inspectors. This license differs from the Repair Technician license in that inspectors are only required to complete four hours of update training for license renewal. To streamline the process, an online course was developed for inspectors to renew their license and published on BAR’s Web site. The course allows inspectors to receive the training via the Internet and complete the four-hour training at their convenience and at no charge. The course is interactive and includes a final exam that the student must pass to receive a certificate of completion. The training unit continues to explore new technologies and ideas to develop training programs that help to ensure Smog Check technicians remain informed and up-to-date on the newest automotive technology.

**Status:** Training program updates were implemented by BAR in 2012. Development of new proposals to streamline and enhance the training opportunities available to Smog Check technicians is ongoing.