

**Date:** July 17, 2002

**To:** Inter-Regional Partnership Members

**From:** IRP Staff

**RE:** Smog Check II

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### **Background**

On May 15<sup>th</sup>, the Inter-Regional Partnership (IRP) discussed future program topics for the Partnership to consider. One of the topics that engendered the most discussion was the issue of air quality (one of the founding interests of the IRP), most notably the effort to extend Smog Check II to the Bay Area.

### **Discussion**

At the May IRP meeting, members noted that the issue of air quality was important to the IRP region, for there are currently two lawsuits pending related to complaints that air pollution from the Bay Area is significantly contributing to air pollution violations in the Central Valley.

Mr. Will Gonzalez from Assembly Member Dennis Cardoza's office will be present to discuss AB 2637, the Smog Check II legislation authored by Assemblyman Dennis Cardoza. This bill would require that the Smog Check II program be extended to the San Francisco Bay Area. Since the state strengthened its smog-check program in 1994, the Bay Area has been the only urban area of the state exempt from more stringent testing of tailpipe emissions because the region meets federal air quality standards.

Staff recommends that the IRP take a position on Smog Check II legislation and submit an official position letter from the group.

### **Requested Action**

Discuss AB 2637 and determine whether the IRP will support the legislation. If the Partnership decides to support AB 2637, direct staff to prepare a letter of support from the IRP to be forwarded to the author of the bill and all IRP legislators.

BILL NUMBER: AB 2637      AMENDED  
BILL TEXT

AMENDED IN ASSEMBLY    APRIL 22, 2002

INTRODUCED BY    Assembly ~~Member~~ ~~Cardoza~~  
*Members Cardoza, Cox, and Matthews*  
    *(Coauthors: Assembly Members Ashburn, Briggs, Cogdill,*  
*Florez, Pescetti, Reyes, and Steinberg)*  
    *(Coauthors: Senators Costa, Machado, Monteith, and Ortiz)*

FEBRUARY 22, 2002

An act to add Section 44003.5 to the Health and Safety Code,  
relating to air pollution.

LEGISLATIVE COUNSEL'S DIGEST

AB 2637, as amended, Cardoza. Air pollution: enhanced motor  
vehicle inspection and maintenance program: San Francisco Bay Area  
Basin.

Existing law establishes an enhanced motor vehicle inspection and  
maintenance program ~~—(smog check—~~ *(Smog Check*

II) in each urbanized area of the state, any part of which is  
classified by the United States Environmental Protection Agency as a  
serious, severe, or extreme nonattainment area for carbon monoxide.  
Existing law requires the State Air Resources Board to divide the  
state into air basins based upon similar meteorological and  
geographic conditions and political boundaries, and existing  
state board regulations establish the San Francisco Bay Area  
Basin.

This bill would establish that enhanced motor vehicle inspection  
and maintenance program in the San Francisco Bay Area Basin.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 44003.5 is added to the Health and Safety Code,  
to read:

44003.5. ~~The~~ *Notwithstanding any other*  
*provision of law, the enhanced motor vehicle inspection and*  
*maintenance program described in Section 44003 is established in the*  
*San Francisco Bay Area Basin.*

## **Bay Area Exemption Hurts Everyone** **By Assemblyman Dennis Cardoza**

The Bay Area's exemption from the Smog Check II program--which requires a higher level of vehicle emissions testing and which is required in every other urbanized area of the state--is hurting the Bay Area as much as it is hurting downwind regions. A recent report from the Latino Issues Forum found that the greatest numbers of asthma-related hospitalization are occurring in predominantly low-income communities of color, most with a large Latino population. These communities include San Francisco, Oakland, Fresno, Sacramento, Modesto and Stockton—all recipients of Bay Area emissions.

Opponents of Smog Check II in the Bay Area argue that the program is unnecessary because their air quality is already good. Have they forgotten that Bay Area air pollution exceeded federal clean air standards in 1998, 1999, and again in 2000? The region's recently adopted Ozone Plan acknowledged a need to reduce emissions by 39 tons per day, but only reduced emissions by 12 tons per day. This 27-ton shortfall has led to a series of lawsuits that threaten to once again freeze federal transportation funding for the Bay Area.

Another misguided argument against Smog Check II suggests that there is no conclusive evidence that Bay Area smog contributes to poor air quality in downwind regions. Since 1990, the California Air Resources Board (ARB) has found in three separate studies that the Bay Area significantly or overwhelmingly contributes to the poor air quality of downwind regions. ARB Executive Director Michael Kinney stated in a recent letter to the Bay Area Air Quality Management District, "Our estimates show that emissions from vehicles could be significantly reduced by implementing the program (Smog Check II) in the Bay Area, which would benefit residents of the Bay Area and downwind communities."

But Smog Check II is expensive, right? Wrong. The ARB estimates that the Smog Check II test cost \$12 more than the current test and repair costs average about \$9 more. That's good news for consumers, but why should Bay Area businesses support enhanced Smog Check II?

Motorists and businesses should share the responsibility of reducing air pollution. In the Central Valley, motorists adhere to the stricter Smog Check II standards which helps to reduce the amount of emissions that regulators would otherwise look to businesses to reduce. However, in the Bay Area, businesses alone must bear the lion's share of the burden for reducing emissions through costly emissions reduction technologies because vehicles in the Bay Area are allowed to pollute at higher levels.

The Smog Check II program in the Bay Area will improve health, protect transportation funding, and reduce the clean air regulatory burden on Bay Area businesses. It's time to end the rhetoric and do the right thing.



# United States Senate

WASHINGTON, DC 20510-0504

<http://feinstein.senate.gov>

May 6, 2002

Mr. Randy Attaway  
Chairman  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109

Dear Mr. Attaway:

I am writing to ask about the Bay Area Air Quality Management District's efforts to reduce ozone and to comply with federal clean air standards.

What is the plan for the Bay Area to attain clean air which meets the federal standards? I have been told that the current Bay Area Air Quality plan does not require Smog Check II technologies to reduce nitrogen oxides. As I understand it, Smog Check II is one of the most effective programs for reducing air pollution and I am puzzled that the Bay Area would not use the program when every other major urban area in California does employ Smog Check II.

I am particularly concerned that by opting not to use Smog Check II, the Bay Area will contribute to inland air districts not meeting federal attainment standards and will negatively impact health and air quality in those regions. The Bay Area has a proud history of environmental leadership and I would hope that the Bay Area Air Quality Management District would continue to work to ensure the health and air quality locally as well as in neighboring regions.

Thank you for your attention to this matter.

Sincerely yours,

A handwritten signature in cursive script that reads "Dianne Feinstein".

Dianne Feinstein  
United States Senator

# FACT SHEET

## Understanding the Effects of Implementing Enhanced Smog Check in the Bay Area

California's Smog Check programs are designed to ensure that vehicles operate with the lowest possible emissions as they age. The emissions standards or "cutpoints" used to pass or fail vehicles differ by model year and weight class, reflecting a vehicle's original emissions certification level with an allowance for deterioration over time. Proper vehicle maintenance and not tampering with the emissions control equipment are key to passing Smog Check.

There are two kinds of vehicle testing programs being operated in California by the Bureau of Automotive Repair (BAR) – Basic Smog Check and the more rigorous Enhanced Smog Check. Vehicles registered in the Bay Area are currently subject to only the Basic program.

### Why is the Enhanced Smog Check program more effective in reducing air pollution?

Compared to the Basic program, the Enhanced program is more effective in reducing air pollution because it uses a treadmill-like device called a dynamometer that more accurately simulates real-world driving conditions. This also allows testing for additional pollutants in the vehicle exhaust. The Enhanced program also relies on a sophisticated "BAR-97" computer analyzer to measure emissions and transmit data directly to BAR.

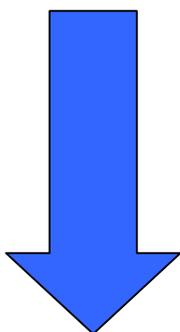
In areas required by law to have Enhanced Smog Check, the full program includes a provision for special "test-only" stations that can inspect but not repair vehicles. Based on emissions profiles, vehicles expected to have high emissions are directed to these test-only stations for their initial inspections, along with a small random sample of other vehicles. Failing vehicles must be fixed elsewhere and re-tested at a "test-only" station. Alternatively, the consumer can choose to have the vehicle both repaired and re-tested at a Gold Shield station. The remaining vehicles in an Enhanced area can be inspected at "test-and-repair" stations; failing vehicles can be fixed and re-tested at the same station. Areas that want to upgrade from Basic to the Enhanced program for its greater air quality benefits can opt-in to all provisions, except for test-only stations – we will refer to this version of the program as "Partial Enhanced" Smog Check.

Factor	Basic Program	Enhanced Program
Vehicle Mode	Idling	In motion on dynamometer
Analyzer Type	BAR-90	BAR-97
Pollutants Tested	Reactive organic gases (ROG) Carbon monoxide (CO)	Reactive organic gases (ROG) Carbon monoxide (CO) Nitrogen oxides (NOx)
Station Types	Basic – Test-and-repair	Full Enhanced – Test-only for likely high emitters, plus test-and-repair Partial Enhanced – Test-and repair

## What would be the public health benefits of implementing the Enhanced program in the Bay Area?

Implementing Enhanced Smog Check in the Bay Area would provide public health benefits to Bay Area residents by further reducing ROG and CO emissions, and adding NOx reductions as well. ROG and NOx react with other compounds in the atmosphere to form fine particles, as well as ozone. Since ROG contains many toxic gases, like benzene, cutting ROG provides toxics benefits as well. Cleaner vehicle fleets will reduce air toxics emissions in neighborhoods, which is a key goal of the Air Resources Board's Environmental Justice Policies.

Implementing the partial Enhanced Smog Check program in the Bay Area would protect the health of Bay Area residents by:



- Reducing gases that form ozone and fine particles
  - ROG by 7 tons per day
  - NOx by 11 tons per day
- Cutting carcinogenic toxics
  - Benzene by over 400 pounds per day.
  - Formaldehyde by almost 300 pounds per day
  - 1,3-Butadiene by 100 pounds per day
  - Acetaldehyde by over 50 lbs per day

Fine particles are formed from NOx and other compounds and are linked with premature death in people with existing ailments, infant mortality, slow lung growth in children, and aggravation of asthma and bronchitis. Airborne particles may cause sudden death by penetrating deep into the lung and interfering with normal operation of the heart and circulatory system.

Based on existing air quality modeling tools, the emission reductions from Partial Enhanced Smog Check in the Bay Area would cut ozone levels in downwind regions, without increasing ozone levels locally. The additional ROG and NOx reductions combine to show a neutral impact on ozone at the Livermore peak site.

If State law were amended to allow Bay Area to implement the full Enhanced program, with the test-only station element, ROG could be reduced by another 3 tons per day and NOx by another 5 tons per day.

To the extent that NOx and airborne particles generated from vehicles deposit into San Francisco Bay, lowering those pollutants could benefit water quality as well.

## How would the Enhanced Program affect consumers?

The table below compares the Basic Smog Check program to the Enhanced program in terms of the effect on consumer convenience and cost, based on 2001 statistics provided by the Bureau of Automotive Repair. The numbers shown below for the Basic program are the average of current testing results specific to the Bay Area. The Enhanced program statistics reflect the average for areas in California currently implementing this program.

Factor	Basic Program (Bay Area Statistics)	Enhanced Program (Statewide Statistics)
Test Time	10 minutes	12 minutes
Test Cost	\$37	\$45
Failure Rate	7%	15%
Repair Cost	\$136	\$145
Pollutants Reduced	ROG, CO	ROG, CO, NOx

## How would the Enhanced program affect Smog Check stations?

- 1,750 Smog Check stations in Bay Area
- 27 percent of stations area already equipped with BAR-97 analyzers
- 2 percent of the stations are already equipped with dynamometers

Other stations would need to update their equipment. Since BAR already plans to require the BAR-97 analyzer for all Smog Check stations statewide in 2003, Bay Area stations will need to upgrade their analyzers at a purchase cost of \$15,000 to \$20,000 (plus an annual service contract at about \$3,000 to \$5,700 per year) whether the region implements the Enhanced program or not. A full conversion of a station to Enhanced includes the following additional steps:

- Require technicians to obtain Advanced Emission Specialist license.
- Purchase/lease a BAR certified dynamometer for approximately \$14,000 (includes installation for an *above ground* system only).
- If installing an *in-ground* dynamometer, construct the pit for \$3,000 to \$10,000 and obtain permits from city/county for about \$800 to \$1,750.
- Purchase digital storage oscilloscope meeting BAR specifications for approximately \$1500 to \$4,000.
- Purchase straps and/or wheel blocks (up to \$600).

There would be minimal “soft” cost to station owners. Station down time due to upgrading to Enhanced is negligible unless station waits until after the program start date to install equipment and get BAR certification (in this case, down time could be up to two weeks). Station down time due to technician license upgrade is zero. Most stations do not pay for technician class time or tuition, i.e., technicians take classes on their own time.

## How would the Enhanced program affect technicians?

- 3,224 Smog Check technicians currently in Bay Area
- 809 technicians already have an Advanced Emission Specialist Technician License

The rest of the existing technicians would need to upgrade their skills to obtain an Advanced Emission Specialist Technician License:

- Complete the Advanced Clean Air Car Course for about \$50 at a community college or approximately \$700 at private training institute.
- Take and pass the Advanced Emission Specialist Technician exam for \$85.

## What areas in California are required to have Enhanced Smog Check?

All major urban areas in California, except the Bay Area, are required under federal and State law to have the full Enhanced Smog Check program in place now. The federal Clean Air Act requires the program in the urbanized portions of ozone nonattainment areas classified serious or higher and in carbon monoxide nonattainment areas classified as serious. State law defines urbanized areas as those with a population of 50,000 or more.

<b>Areas with Full Enhanced Smog Check Program</b>		
Bakersfield	Modesto	South Coast Air Basin
Davis	Palm Springs	Stockton
Fresno	Sacramento	Vacaville
Hemet-San Jacinto	San Diego County (Western)	Ventura County (Southern)

## What areas have opted-in to the partial Enhanced Program?

To achieve more air quality benefits, five air districts have voluntarily requested to opt additional areas within their jurisdiction into the partial Enhanced Smog Check program. The air districts and the additional areas are listed below.

<b>District</b>	<b>Additional Areas Opted-In</b>
Sacramento Metropolitan Air Quality Management District	Remainder of Sacramento County
San Joaquin Valley Unified Air Pollution Control District	Lodi, Manteca, Merced, Tracy, Turlock, Visalia, Highway 99 corridor
South Coast Air Quality Management District	Remainder of Riverside County within District boundaries, including Temecula
Ventura County Air Pollution Control District	Remainder of Ventura County, excluding Frazier Park and Maricopa
Yolo-Solano Air Quality Management District	Remainder of Yolo and Solano Counties within the District's boundaries

The attached map graphically illustrates California's Enhanced Smog Check areas, both those required to have the full program and those opting-in to the partial program.



**Winston H. Hickox**  
Agency Secretary

# Air Resources Board

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**Alan C. Lloyd, Ph.D.**  
Chairman

1001 I Street • P.O. Box 2815 • Sacramento, California 95812 • [www.arb.ca.gov](http://www.arb.ca.gov)



**Gray Davis**  
Governor

Honorable Randy Attaway  
Chairman, Board of Directors  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109

Dear Chairman Attaway:

I want to thank you again for participating in the first roundtable discussion on possible implementation of Enhanced Smog Check in the Bay Area. I believe the meeting was productive in large part because of the participants' desire to work cooperatively and your willingness to take the next step. At your request, we are available to participate in Bay Area meetings to further consideration of a regional opt-in to the Enhanced program.

At the meeting, you requested Bay Area-specific costs and benefits information for implementing an Enhanced Smog Check program. We have coordinated with the Bureau of Automotive Repair (BAR) in gathering the information presented in the enclosed fact sheet. BAR provided the statistics relating to impacts on the consumer, station owner, and technician. Our estimates show that emissions from vehicles could be significantly reduced by implementing the program in the Bay Area, which would benefit residents of the Bay Area and downwind communities. Cleaner vehicle fleets will reduce air toxics emissions in neighborhoods, which is a key goal of the Air Resources Board's Environmental Justice Policies.

If you have any questions or would like further assistance, please call me at (916) 445-4383.

Sincerely,

Michael P. Kenny  
Executive Officer

Enclosure

cc: See next page.

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.*

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California Environmental Protection Agency

Honorable Randy Attaway

Page 2

cc: Honorable Mark DeSaulnier (with enclosure)  
Board Member  
Air Resources Board

Mr. Pat Dorais (with enclosure)  
Acting Chief  
Bureau of Automotive Repair  
10240 Systems Parkway  
Sacramento, California 95827

Ms. Ellen Garvey (with enclosure)  
Executive Officer  
Bay Area Air Quality  
Management District  
939 Ellis Street  
San Francisco, California 94109

Honorable Randy Attaway

Page 3

bcc: (all with enclosure)

Catherine Witherspoon, CO

Tom Cackette, EO

Lynn Terry, EO

Kathleen Walsh, OLA

Leon Vann, EO

Bob Fletcher, PTSD

Linda Murchison, PTSD

Bob Effa, PTSD

Cynthia Marvin, PTSD

Gary Honcoop, PTSD

Kim Heroy-Rogalski, PTSD

Kurt Karperos, PTSD

Bruce Tuter, PTSD

Jon Taylor, PTSD

Sylvia Morrow, PTSD

PTSD Chron

AQTPB Chron

Reading File (2)

Assignment #7731

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