

State of California  
AIR RESOURCES BOARD

**STAFF REPORT: INITIAL STATEMENT OF REASONS FOR  
PROPOSED RULEMAKING**

**Proposed Amendments to the Enhanced Fleet Modernization Program  
(Car Scrap)**

Date of Release: **May 6, 2014**

Scheduled for Consideration: **June 26, 2014**

This report has been reviewed by the staff of the Air Resources Board (ARB or Board) and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of ARB, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.



## TABLE OF CONTENTS

I.	INTRODUCTION AND BACKGROUND .....	1
A.	Vehicle Retirement Programs .....	2
1.	Enhanced Fleet Modernization Program (EFMP) .....	2
2.	Statewide Consumer Assistance Program .....	3
3.	Other Existing Retirement Programs .....	3
B.	Purpose for Amendment of Regulation .....	4
1.	2013 Program Assessment .....	4
a.	Retirement Element .....	4
b.	Pilot Replacement Voucher Element .....	6
2.	Legislation Affecting EFMP - SB 459 Pavley .....	7
II.	STATEMENT OF REASONS .....	7
A.	Retirement-Only Program .....	8
1.	Limit EFMP Retirement-Only to low-income participants .....	8
2.	Require the vehicle to complete a Smog Check test to demonstrate functionality .....	8
3.	Monitoring Program Participation .....	8
4.	Provide modifications to ensure consistency with CAP and to simplify implementation .....	9
B.	Pilot Retire and Replace Program .....	9
1.	Income Eligibility/Outreach .....	10
2.	Retirement .....	11
3.	Replacement .....	11
4.	Alternative Transportation Mobility Options .....	14
5.	Administration .....	15
6.	Other Revisions .....	15
7.	Pilot Models .....	16
C.	Rationale Supporting Amendments to EFMP Regulations .....	17
III.	PROPOSED ACTION .....	17
IV.	AIR QUALITY .....	17
V.	ENVIRONMENTAL IMPACTS ANALYSIS .....	18
A.	Introduction .....	18
B.	Proposed Amendments .....	19
C.	Alternatives Considered .....	19
1.	No Change .....	19
2.	Immediately Increase Retirement Incentive Amounts .....	19
3.	Allow Moderate Income to Participate in Retirement .....	20
VI.	ENVIRONMENTAL JUSTICE .....	20

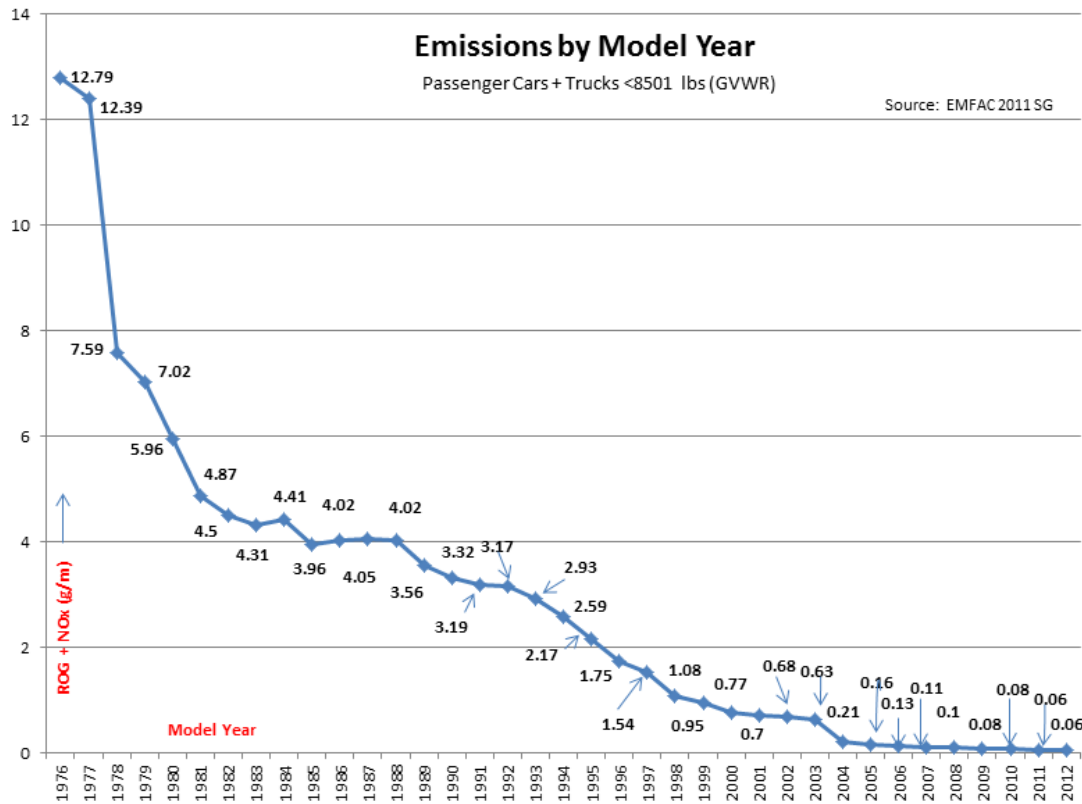
VII. ECONOMIC IMPACTS ANALYSIS/ASSESSMENT .....	21
A. Potential Cost Impacts of the Proposed Regulation .....	21
B. Major Regulations.....	21
C. Significant Adverse Economic Impact Directly Affecting Business .....	22
D. Justification for Adoption of Regulations Different from Federal Regulations Contained in the Code of Federal Regulations .....	23
E. Benefits of the Proposed Regulation .....	23
VIII. Summary and Rationale for Each Regulatory Provision .....	23
A. Section 2620 Purpose .....	24
B. Section 2621 Definitions .....	24
C. Section 2622 Program Administration.....	24
D. Section 2623 Program Limits .....	24
E. Section 2624 Retired Vehicle Minimum Eligibility Requirements .....	25
F. Section 2625 Ineligible Vehicles.....	25
G. Section 2626 Retirement-Only Program.....	25
H. Section 2627 Pilot Retire and Replace Program .....	26
I. Section 2628 Parts Recycling and Resale .....	26
J. Section 2629 Records and Auditing .....	26
K. Section 2630 Severability.....	27
IX. PUBLIC PROCESS FOR DEVELOPMENT OF PROPOSED ACTIONS.....	27
X. REFERENCES .....	28
APPENDIX A: PROPOSED REGULATION ORDER.....	A-1
APPENDIX B: HEALTH AND SAFETY CODE SECTION 44125-44126 .....	B-1
APPENDIX C: INCOME ELIGIBILITY AND VEHICLE AFFORDABILITY.....	C-1
APPENDIX D: ESTIMATED EMISSIONS BENEFITS.....	D-1
APPENDIX E: CALCULATION OF COST EFFECTIVENESS OF EFMP.....	E-1

## I. INTRODUCTION AND BACKGROUND

Although California has been the nation's leader in efforts to reduce air pollution, the State -- and in particular the South Coast and the San Joaquin Valley air basins, home to nearly 50 percent of the State's passenger vehicles<sup>1</sup> -- continues to struggle with air quality problems. California's 23 million passenger cars and light- and medium-duty trucks, which travel close to 865 million miles per day, contribute significantly to the problem<sup>2</sup>. Older vehicles, which are certified at higher emission levels, account for a larger share of these emissions than newer models that comply with more stringent emission standards.

The emission rate of a 20 year old vehicle, in terms of grams per mile of oxides of nitrogen (NOx) plus reactive organic gases (ROG), is about 30 times that of a model vehicle as shown below in Figure I-1. Vehicles that are 20 years old and older account for only 5 percent of all miles traveled, but are responsible for 40 percent of daily smog-forming emissions from motor vehicles<sup>3</sup>. These facts make retirement of older vehicles an attractive strategy to combat excess emission of pollutants from on-road motor vehicles.

**Figure I-1: Vehicle Emission Rate by Model Year**



<sup>1</sup> EMFAC2011 (<http://www.arb.ca.gov/emfac/>).

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

There are currently more than one million<sup>4</sup> vehicles retired every year as part of normal fleet turnover in California. California's low-emission new car standards are dependent on this natural turnover for significant emission reductions. However, extra emission reduction benefits can be achieved through the early retirement of fully functional but high emitting vehicles. Providing monetary incentives can provide the necessary and cost-effective "push" for retiring many of these older, inherently higher-emitting vehicles. Additional incentives for fuel efficient vehicles can help transition consumers into newer vehicles which provide additional air quality benefits and reduce fuel costs.

#### A. Vehicle Retirement Programs

There are currently several vehicle retirement programs that are offered to consumers throughout the State.

##### 1. Enhanced Fleet Modernization Program (EFMP)

EFMP is a vehicle retirement and replacement program authorized by Assembly Bill (AB) 118 (Nunez, Chapter 750, Statutes of 2007, California Health and Safety Code Section 44125, amended 2010, 2013). EFMP is funded by a \$1 surcharge on motor vehicle registration, translating into about \$30 million each fiscal year.

The purpose of the program is to retire high-polluting passenger vehicles and light-duty and medium-duty trucks by voluntary means. Statute directs that the program should be focused on the areas with the greatest air quality impact and considers cost-effectiveness and impacts on disadvantaged and low-income populations. Low-income is defined as 225 percent of the federal poverty level, consistent with Bureau of Automotive Repair (BAR) Consumer Assistance Program (CAP) income eligibility requirement<sup>5</sup>. EFMP's authorizing statute also directs that compensation should take into account the age, emission benefits of retirement, and the impact of any replacement vehicle.

ARB, in consultation with BAR, adopted guidelines in 2009 to administer two separate program elements: a Retirement-Only program, and a Pilot Replacement Voucher program.

- *Retirement-Only*: This element was implemented in August 2010 and is administered by BAR. Motorists are offered \$1,000 (\$1,500 for low-income) to permanently retire their vehicles. The EFMP Retirement-Only element is extremely popular with motorists. BAR has retired over 85,000 vehicles (66 percent low-income) since inception and funds are typically exhausted within the first eight months of the fiscal year.

---

<sup>4</sup> EMFAC2011 (<http://www.arb.ca.gov/emfac/>) difference between new model year population and total population growth.

<sup>5</sup> Specific income eligibility criteria can be found in 16 California Code of Regulations § 3394.4.

- *Pilot Replacement Voucher*. This element was implemented in June 2012 in the South Coast Air Quality Management District (SCAQMD). About \$3 million (10 percent of total annual funds) was allocated for a pilot voucher program which solicited over 12,000 motorists in the SCAQMD with vehicles either known or suspected to be the highest emitters and offered an additional \$2,000 (\$2,500 for low-income) above the retirement-only incentive towards the purchase of a newer vehicle less than four years old (or less than 8 years old, if low-income). However, as of November 2013, only 22 people had taken advantage of this offer of additional funds towards vehicle replacement, and the program was suspended in December 2013.

The popularity of the retirement-only element has developed without any formal advertising or promotion. However, this popularity is in stark contrast to the very limited participation in the replacement element which offered a larger incentive, but was only available to high polluters identified by ARB and BAR based on existing vehicle Smog Check emissions data and located in the South Coast air basin.

## 2. Statewide Consumer Assistance Program

The other statewide retirement program is the vehicle retirement element of CAP, which is also administered by BAR and receives roughly the same annual funding as EFMP. CAP is designed to assist motorists to comply with the Smog Check vehicle inspection program. CAP provides qualified consumers who fail a Smog Check test the option to retire a vehicle and receive \$1,000. As with EFMP, consumers meeting low income eligibility requirements (i.e., that are below 225 percent of the federal poverty level) may receive \$1,500. CAP also provides qualified consumers up to \$500 in financial assistance toward emissions-related repairs.

Although CAP and EFMP have different goals, the two programs are generally perceived by the public as a single program because EFMP is administered by BAR under the CAP label using the existing CAP application. The objective of CAP is to provide options for Californians facing difficulties in registering their vehicles resulting from a failing Smog Check, while EFMP's goal is to improve air quality through the voluntary retirement of light- and medium-duty vehicles. Many consumers are familiar with the CAP name, but the name EFMP exists only in statute and regulation.

## 3. Other Existing Retirement Programs

There are seven other publicly funded vehicle retirement programs either planned or currently operating within the State. Six of the seven are local programs operated by air districts using Carl Moyer Program, AB 923, or other local funds. These local programs have been in operation three to seven years and are collectively much smaller than EFMP in terms of total funding, with approximately \$21 million expended to date as shown in Table I-1: Vehicle Retirement Programs Implemented by Air Districts.

**Table I-1: Vehicle Retirement Programs Implemented by Air Districts**

Air District	Funding <sup>1</sup>
Antelope Valley Air Quality Management District	\$350,000
Bay Area Air Quality Management District	\$16,000,000
Mojave Desert Air Quality Management District	\$475,000
San Luis Obispo Air Pollution Control District	\$200,000
Santa Barbara Air Pollution Control District	\$1,200,000
South Coast Air Quality Management District	\$2,780,000 <sup>2</sup>

<sup>1</sup> As of November 2013.

<sup>2</sup> Depending on the final approved changes to EFMP, the South Coast Air Quality Management District may continue its High Emitter Repair or Scrap voluntary pilot program, which uses remote sensing to detect “gross-polluting” cars, pickups, SUVs and vans, and provides incentives to repair them or scrap and replace them.

The 2007 State Implementation Plan (SIP) includes a commitment to expand the State’s existing program to achieve reductions equivalent to the early retirement of 50,000 and 10,000 vehicles per year in the South Coast and San Joaquin Valley air basins, respectively. These totals represent about half of one percent of the vehicles subject to Smog Check in each region and would provide emission benefits equal to 2 percent of light-duty vehicle emissions in 2014. AB 118 funding for EFMP represents a significant step in the State’s effort in meeting these ambitious SIP commitments.

**B. Purpose for Amendment of Regulation**

**1. 2013 Program Assessment**

In 2013, ARB and BAR staff conducted an assessment of vehicles retired through EFMP to determine the program’s effectiveness and to identify opportunities for improvement. These results were presented to the Board in November 2013 and the presentation and full report are available at <http://www.arb.ca.gov/msprog/aqip/efmp/efmp.htm>.

**a. Retirement Element**

ARB and BAR staff conducted a study of EFMP vehicles retired over a period of several weeks and stored at auto dismantlers in Rialto and Ontario in early 2013. The purpose of the study was to determine the program’s effectiveness and to identify opportunities for improvement.

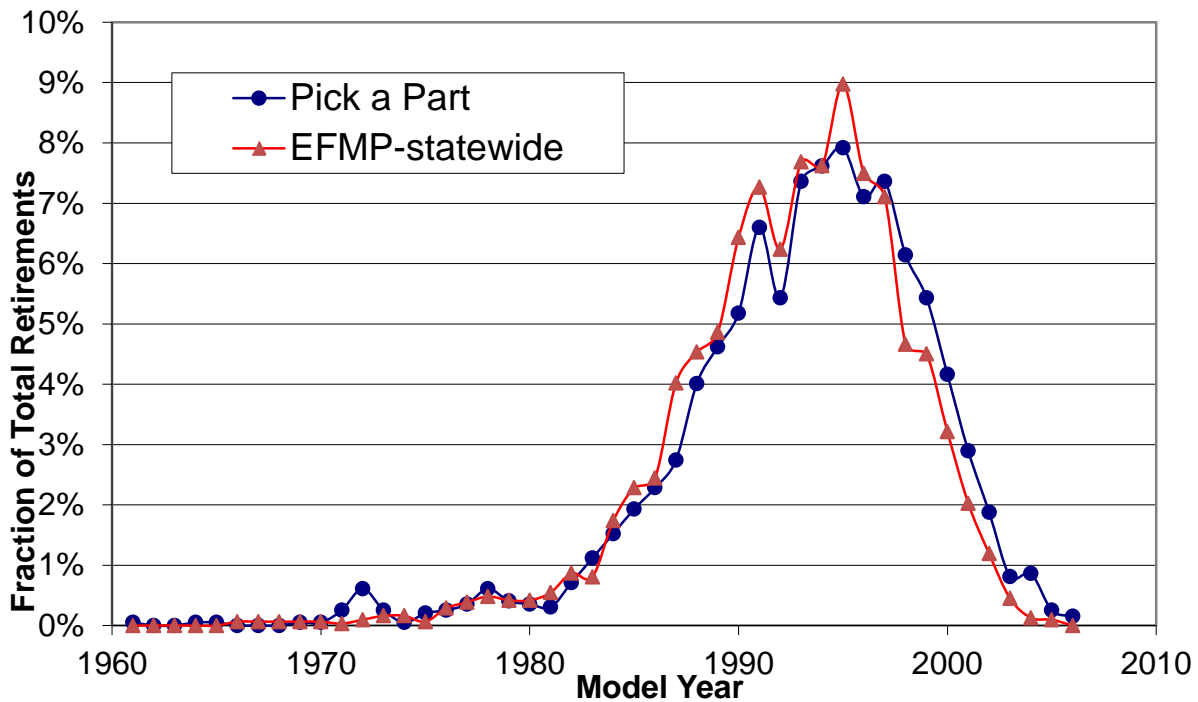
A total of 164 vehicles were assessed as a part of the study. All of the vehicles were assessed qualitatively, and 140 were assessed quantitatively using the standard Acceleration Simulation Mode (ASM), roadside Smog Check dynamometer test. The key findings from this study confirm that the vehicles entering the EFMP are generally high emitters, but are also generally vehicles with limited functionality. Sixty percent of the vehicles tested failed the Smog Check test, with 21 percent failing as gross



polluters<sup>6</sup>. For comparison, on average, 25 percent of similarly aged vehicles across the entire statewide fleet fail the Smog Check test, with only six percent failing as gross polluters<sup>7</sup>.

Figure I-2 shows the model year distribution of EFMP vehicles retired statewide in December 2012 and non-EFMP vehicles naturally retired at the Ontario dismantler (Pick-A-Part) during approximately the same period (dismantler data is based on vehicle inventory on January 18, 2013--vehicles are held for 6 weeks prior to destruction). The model year profile of vehicles entering EFMP also suggests high levels of effectively nonfunctional vehicles because it is almost exactly the same as vehicles retired naturally during the same time period at the dismantlers where the study was conducted. The data make it apparent that consumers have already decided their vehicles are not capable of continued function prior to participating in the Retirement-Only element.

**Figure I-2: Distribution by Model Year of Vehicles Retired by EFMP vs. Natural Retirement**



Note that the mean age of the EFMP vehicles computed using data from the chart above was 21 years which is nearly the same as the 20 year mean age of naturally

<sup>6</sup> The emission level at which a vehicle fails as a Gross Polluter varies according the vehicle type and year. Specific test limits for gross polluters can be found in 16 CCR § 3340.42.

<sup>7</sup> BAR Random Roadside data, 2010-2012

retired vehicles.<sup>8</sup> On average, the program purchased slightly older vehicles that were nearly identical to those naturally scrapped during the same time period.

The prevalence of high emitters in the sample population is encouraging, but the lack of remaining useful life in retired vehicles seriously limits the program's effectiveness for reducing pollution. Roughly 60 percent of the vehicles had expired registration and could not legally be used without repairs to pass the Smog Check test and re-register, and about 30 percent of the vehicles could not physically be used without mechanical repairs.<sup>9</sup>

The key findings from the program assessment confirm that the vehicles entering EFMP retirement are generally high emitters, but also generally at the end of their useful life. The overall conclusion of the assessment of the sample of participating vehicles is that while EFMP is meeting program goals by purchasing and retiring high emitting vehicles, the cost-effectiveness and emission benefits of the program could be substantially improved by ensuring that only vehicles with significant remaining useful life are allowed to participate.

#### b. Pilot Replacement Voucher Element

In addition to assessing the performance of the retirement program, staff investigated the replacement element's low response rate and whether the incentives offered were appropriate for the target audiences and vehicles. Specifically, staff looked at whether the retirement incentive offered was sufficient to cover the value of the retired vehicle that could be received elsewhere, and whether the replacement amount was sufficient to enable low-income participants to purchase a cleaner replacement vehicle.

Staff review of classified ads found the mean advertised price of vehicles offered for sale in running condition and similar to those solicited for participation in the EFMP retirement plus replacement voucher element range from \$4,000 listed by a dealer and \$5,000 listed by a private party.<sup>10</sup> That value is approximately equal to, and perhaps slightly less than, the \$3,000 to \$4,000 total retirement plus voucher incentive amount offered by the program. This generally means the pilot program has, on average, not offered motorists an incentive above the current value of their existing vehicle to retire it and upgrade in EFMP. Considering this, likely program participants were those people who had coincidentally already decided to replace their vehicle and/or outliers at the lower end of the value distribution.

In addition, the direct solicitation in the pilot replacement program has proven to be inefficient both in terms of administrative costs and participation rates. Over 12,000

---

<sup>8</sup> Posted vehicle inventory at <http://www.pickapartauto.com/inventory/ontinv.html> on 1/18/13 compared to EFMP participating vehicles during December 2012.

<sup>9</sup> This analysis conducted for vehicles still displaying license plates and vehicle test histories from <http://www.bar.ca.gov/pubwebquery/vehicle/pubtstqry.aspx>.

<sup>10</sup> [www.autotrader.com](http://www.autotrader.com) and [www.craigslist.com](http://www.craigslist.com) (multiple access dates May to July 2013) for vehicles advertised for sale in the SCAQMD.

owners of likely high emitting vehicles were contacted by mail for participation in the replacement program with 1,436 expressing interest by returning a postage-paid card. Each respondent was subsequently contacted via phone by BAR staff, which then mailed 211 applications to the most interested responders. Ninety-five of those vehicle owners received approval and BAR staff provided them with direction on how to purchase a vehicle and claim the additional incentive. Of those 95 approved to participate, 72 elected for retirement only, and by the end of the program, only 22 opted to claim the full retirement and replacement incentive. These consumers then retired their vehicle before applying again for the replacement incentive and subsequent use at a dealership in the program. This complex process and narrow outreach to a relatively small population combined to result in low program usage.

## 2. Legislation Affecting EFMP - SB 459 Pavley

In addition to the Assessment, Governor Brown signed Senate Bill 459 Pavley (SB 459, Chapter 437, Statutes of 2013) on September 30, 2014, which directs ARB to improve EFMP to increase the benefits of the program for low-income California residents, promote cleaner replacement vehicles, enhance emission reductions, and increase outreach to community-based organizations.

SB 459 goals include ensuring that vehicles have sufficient remaining life, streamlining administration to simplify participation, coordinating with CAP, and ensuring that the replacement component focuses in federal nonattainment areas. In updating the guidelines, SB 459 requires ARB to study and consider methods of financial assistance other than vouchers, incentives with varied amounts, increased outreach efforts to community-based organizations, and increasing incentives for cleaner vehicles, increasing public transit use, and reducing greenhouse gas emissions. Per SB 459, ARB is required to update the program no later than June 30, 2015.

## II. STATEMENT OF REASONS

The proposed amendments improve EFMP by focusing the program on low-income participants, expanding program flexibility to improve program participation, and ensuring the vehicles that are retired are functional, which enhances emissions benefits. The proposed amendments will address issues arising from the 2013 Program Assessment described above. Amendments are focused in two areas: a Retirement-Only program, and a new Pilot Retire and Replace program (which replaces the Pilot Replacement Voucher element). Staff's proposal to separate the BAR-implemented Retirement-Only program from the air district-administered Retire and Replace program allows flexibility to address regional needs by piloting various approaches while continuing to focus the Retirement-Only portion on statewide implementation. In addition, the new Pilot Retire and Replace program seeks to improve participation in the Retire and Replace aspect of EFMP. The proposed regulation text is contained in Appendix A.

## A. Retirement-Only Program

The EFMP Retirement-Only program exists to incentivize California motorists to voluntarily retire older, higher polluting passenger vehicles and light and medium-duty trucks. The proposed Retirement-Only requirements are listed below:

### 1. Limit EFMP Retirement-Only to low-income participants

Staff proposes limiting participation in the Retirement-Only portion of EFMP to low-income participants with less than or equal to 225 percent of the Federal Poverty Level. The EFMP Retirement-Only program is oversubscribed, typically exhausting the funding within the first eight months of each fiscal year, with approximately 60 percent of the participants meeting the aforementioned income eligibility criteria. Restricting program participation will ensure that the limited funds go to the target population and meet the directive of SB 459 that the EFMP focus on low-income participants.

### 2. Require the vehicle to complete a Smog Check test to demonstrate functionality

A more sophisticated acceptance inspection would ascertain sufficient vehicle functionality. While the current acceptance inspection requires the participant to drive the vehicle to the dismantler and demonstrate starting the vehicle engine and 30 feet of forward motion upon arrival, there is no practicable way for the dismantler to verify the vehicle was actually driven to the facility. An improved and objective acceptance test could enhance the quality of participating vehicles, and significantly increase the benefits of the program. The ASM dynamometer test is a good candidate for a universally available, widely accepted, and objective operating test.

Staff proposes requiring a vehicle to take (or have taken within the previous 180 days) a Smog Check test as a simple means of determining its functionality. Successful completion of a Smog Check test, whether the end result is a pass or a fail, is a good indication that a vehicle is in sufficient condition to be driven on the road, and that retiring the vehicle will provide real air quality benefits.

### 3. Monitoring Program Participation

Setting a more stringent standard for participation runs the risk that the current incentive offered may not be sufficient to attract the higher quality vehicles needed. With the change in eligibility to ensure that scrapped vehicles provide an emissions benefit, ARB and BAR staff would monitor the program to ensure that scrap participation remains high. Specifically, staff proposes to incorporate a provision that if participation has dropped sufficiently to indicate that the retirement program will fall short of expending its annual funding, then incentive amounts for vehicles passing the Smog Check test could be raised incrementally up to \$2,500 total per vehicle to improve participation.

4. Provide modifications to ensure consistency with CAP and to simplify implementation

Staff also proposes a number of additional changes to simplify the program and expand potential participation, including clearly defining the documentation needed in the application (insurance documents, registration, etc.) and allowing the participation of vehicles with salvage titles, provided they are currently registered. These changes have been closely coordinated with BAR to ensure compatibility with CAP.

Increasing the basic incentive for retirement would impact CAP. Administration of CAP and EFMP is indistinguishable to the consumer, and an increase in the incentive amount for EFMP alone would generate confusion among program participants. However, the goals and mandates of CAP and EFMP are different; CAP is designed to purchase end-of-life vehicles, while EFMP is designed to purchase vehicles before end-of-life. While marketplace data indicate a difference in price between these types of vehicles and suggest the incentives should differ, changes in the eligibility requirements for CAP and/or EFMP will need to be carefully considered before any action is taken.

B. Pilot Retire and Replace Program

The current proposed funding for the EFMP Pilot Retire and Replace Program is approximately \$3 million per year in federal extreme non-attainment areas (the South Coast and San Joaquin Valley air basins), consistent with the previous Pilot Replacement Voucher program. To ensure that the proposed program has sufficient resources to be viable in each region, staff proposes that the air district grants for the program be split evenly between the South Coast and San Joaquin Valley air basins resulting in annual funding of approximately \$1.5 million each. Staff will pursue increasing funding from the Retirement-Only program in future years based on program success and demand.

Staff is proposing that air districts have the flexibility necessary to develop their pilot programs for maximum effectiveness, and to determine a sustainable replacement vehicle solution for low-income participants. Each air district may take one or more approaches to program implementation using specific minimum program requirements.

To accurately measure that success and demand, staff proposes that the air districts provide quarterly reports to ARB detailing participation rates, vehicles retired, replacement vehicles purchased, administrative costs, outreach efforts, and other metrics. ARB staff would evaluate the data and determine whether incentive amounts or other program criteria need to be adjusted to improve the program's performance.

Staff proposes the following minimum Pilot Retire and Replace criteria:

1. Income Eligibility/Outreach

- The program must restrict program eligibility to motorists with household incomes of 400 percent of the federal poverty level (FPL) or less. The Federal Poverty guidelines<sup>11</sup> are updated annually and vary by household size as shown in Appendix C. Income eligibility thresholds defined at 225 percent, 300 percent, 400 percent provide various replacement options for qualified participants. For a household size of 4 persons, the qualifying incomes by income eligibility thresholds are \$53,663, \$71,550, and \$95,400 respectively. The 225 percent FPL income threshold is consistent with CAP<sup>12</sup>, while the 300 percent FPL and 400 percent FPL align well relative to income eligibility requirements of other California benefit programs (the California Homebuyer's Down Payment Assistance program has an income eligibility requirement of around 325 percent FPL while Covered California is 400 percent FPL).
- The program must provide significant assistance to program participants to complete transactions. This assistance could take the form of financial education, access to low-cost loans, or other assistance to address issues faced by low-income participants.
- The program must include significant outreach to low-income communities and individuals. Engaging low-income individuals poses several obstacles including lack of trust for the government, language and cultural barriers, and a lack of knowledge or understanding of air quality issues. These obstacles cannot be addressed by methods employed in more traditional air quality incentive programs. Simply increasing incentive amounts as a means to increase participation by low-income motorists is nullified if the target audience does not believe participation to be personally beneficial. Developing meaningful relationships with community-based organizations and leaders to leverage the trust that they have developed within targeted communities is important to mitigate these issues. Table II-1: Potential Outreach Methods lists a variety of possible methods that could be included in an outreach plan, but are not intended to prevent other approaches that an air district believes will be successful.

---

<sup>11</sup>U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation: <http://aspe.hhs.gov/poverty/14poverty.cfm>.

<sup>12</sup> Section 3394.4 of title 16 of Division 33, Article 11 of the California Code of Regulations.

**Table II-1: Potential Outreach Methods**

General	<ul style="list-style-type: none"> <li>• Develop call centers to assist potential applicants</li> <li>• Develop program websites</li> <li>• Distribute program materials through existing mailing lists</li> <li>• Leverage existing dealership advertising methods</li> </ul>
Low-income specific	<ul style="list-style-type: none"> <li>• Advertising on radio/television/newspapers based in targeted communities</li> <li>• Identify and establish relationships with trusted community organizations (e.g., community advocates, faith-based institutions, etc.)</li> <li>• Distribute materials at schools/health clinics/social assistance offices</li> <li>• Leverage existing outreach done by local or community-based organizations or agencies</li> <li>• Leverage existing financial assistance programs for motorists</li> <li>• Administer program in conjunction with community-based events</li> <li>• Develop partnerships with Community Development Financial Institutions (CDFI)</li> </ul>

2. Retirement

- The program must include a mechanism for targeting high-emitting vehicles. This could include a model year cut-off or another approach.
- The program must include a mechanism to ensure vehicles with sufficient functionality to be currently driven. This could include a functional test or an alternative.
- The program must require that retired vehicles be dismantled at a BAR contracted dismantler.

3. Replacement

The program will allow for additional tiered incentives for purchase of a more environmentally friendly replacement vehicle when a vehicle is retired. The initial incentive levels are shown below in Table II-2: Proposed Retire and Replace Program Minimum Incentives. The incentive levels are designed to be significant enough to assist consumers into newer vehicles at a manageable cost while being as cost-effective as possible and attracting as large a pool as possible. Also, as discussed further below, staff will work with the air districts to enable coordination with other state and local programs such as the Clean Vehicle Rebate Project (CVRP), Carl Moyer Program, and other light-duty low-carbon transportation funding to maximize participation opportunities for low-income participants to acquire either a new or used hybrid or advanced technology vehicle.

**Table II-2: Proposed Retire and Replace Program Minimum Incentives**

Income Eligibility	Replacement Options				
	8 year old or newer	<i>May be also Eligible Low-Carbon Transportation (CVRP) type incentives</i>			Alternative Transportation Mobility Options
		35+ MPG	Plug-In Hybrid <sup>3</sup>	Zero-Emission Vehicle	
Low Income <225% Federal Poverty Level	\$4,000	\$4,500	\$4,500	\$4,500	\$4,500 Face Value
Moderate Income <300% Federal Poverty Level	Not Available	\$3,500	\$3,500	\$3,500	\$3,500 Face Value
Above Moderate Income <400% Federal Poverty Level	Not Available	Not Available	\$2,500	\$2,500	\$2,500 Face Value

In establishing these proposed incentive levels, staff has evaluated existing economic data to estimate what resources participants would require to purchase a replacement vehicle in an effort to gauge how well the incentives proposed correspond with the financial needs of potential participants. Appendix C contains details of the analysis. Staff’s conclusion is that the incentives proposed are consistent with the financial capabilities of the target population and the anticipated replacement vehicles available for sale.

As an example, assuming that 15 percent of income is used for transportation<sup>13</sup>, the data indicate that a participant in a household of four with an adjusted income at 225 percent of FPL could use the proposed EFMP incentive of \$4,500 as a down payment on an affordable loan towards the purchase of a used hybrid vehicle that meets the 35+ mpg.

a) Minimum Fuel Economy Ratings

For low-income participants replacement vehicles must be 8 years old or newer and meet minimum fuel economy ratings as determined by the United States Environmental Protection Agency (U.S. EPA) and published by the United States Department of Energy to be eligible for EFMP funding as shown for each model year in table below. Alternative fuel economy standards are provided to allow for the purchase of minivans 8 years old or newer for participants with larger families or a

<sup>13</sup> U.S. Bureau of Labor Statistics: Consumer Expenditures Report 9/25/12.



need for increased vehicle utility. Additional incentives are provided for more efficient vehicles, achieving at least 35 miles per gallon, per the goals of SB 459.

**Table II-3: Replacement Vehicle Minimum Fuel Economy Requirements**

Model Year	Minimum U.S. EPA Combined Fuel Economy Rating	Minivans Minimum U.S. EPA Combined Fuel Economy Rating
2006 - 2009	20	19
2010	22	19
2011	25	21
2012	28	21
2013	29	21
2014	30	21
2015	31	21

b) Advanced Technology

In addition to the higher incentive offered by EFMP for a more efficient advanced-technology vehicle, there are other incentives still under development, such as the Low-Carbon Transportation Greenhouse Gas Reduction Fund Investments (LCT-GGRF) pilot programs, which represent the initial steps in meeting the long-term goal of widespread use of advanced technology vehicles in California. These pilot programs are included in a parallel process with the development of the AB 118 Air Quality Improvement Program Funding Plan and Recommendations for LCT-GGRF, also scheduled for Board approval at the June 2014 meeting.

To determine a sustainable advanced-technology replacement vehicle solution for low-income participants in disadvantaged communities, staff believes that different approaches to provide assistance must be evaluated and tested. Assistance could be provided in different ways, but at this time staff believes the most promising would be to add an additional total incentive amount which would translate into a higher down payment for a new or used advanced-technology vehicle, or providing finance assistance to reduce interest rates. CVRP could provide additional financial assistance for the purchase of new plug-in hybrid and zero-emission vehicles. In addition, the LCT-GGRF pilot programs are expected to include EFMP Plus-up and Financing Assistance Programs. EFMP Plus-up will provide additional financial assistance for used advanced technology cleaner vehicles under EFMP or other vehicle retirement programs. The Financing Assistance Program will evaluate the feasibility of programs that provide financing assistance, such as loan loss guarantee for financial institutions or programs that buy down interest rates for consumers, in order to improve financing options for low-income individuals interested in moving into cleaner vehicles.

c) Consumer Protections

During the development process, consumer advocates commented that regardless of which approach is used, consumer protection and assistance in the purchasing

process are critical to the program’s success. However, dealerships contend that consumer protection laws are already in existence at both state and federal levels and that additional consumer protection measures would merely complicate the program. In developing its proposal, staff determined that consumer protection is essential to ensuring that the program benefits are realized by the participants. In many cases, low-income motorists have fewer available options for car ownership due to constrained budgets and limited access to low-cost loans, making them particularly susceptible to predatory sales and lending practices. To implement a successful program, there must be a balance between protecting program participants and ease of implementation.

Allowing the air districts flexibility to determine appropriate consumer protections ensures that they are seamlessly integrated into the pilot program avoiding unnecessary complications with program implementation. Concepts to be considered during the development of the program include, but are not limited to, those identified in Table II-4: Consumer Protections to Consider. Staff will review pilot program proposals to ensure that consumer protections are considered and included where feasible. The program must include consumer protection during the purchase and financing of the vehicle to ensure that the benefits of the incentives accrue to the final consumer.

**Table II-4: Consumer Protections to Consider**

Loans	<ul style="list-style-type: none"> <li>• Require or encourage/educate program participants to borrow from reputable lending institutions and even join credit unions to establish credit prior to purchase</li> <li>• Leverage financial counseling offered by most credit unions by directing participants to those resources</li> <li>• Suggest/require program participants be pre-approved before visiting dealership</li> <li>• Administer program through consumer advocacy group to provide financial counseling</li> <li>• Direct program participants to California’s low-cost auto insurance program</li> <li>• Provide an estimate for total cost of car ownership with the truth-in-lending statement (now required by law)</li> </ul>
Vehicle	<ul style="list-style-type: none"> <li>• Require vehicle inspection by reliable, licensed professional auto mechanic</li> <li>• Require vehicle history to be provided and attached to paperwork</li> <li>• Work with dealers to set pre-fixed pricing for used vehicles</li> <li>• Require vehicle warranty for specified timeframe</li> </ul>

#### 4. Alternative Transportation Mobility Options

Under the current regulations, EFMP replacement incentives can be redeemed for transit passes instead of a replacement vehicle. However, providing monetary incentive for alternate mobility options will not entice individuals if the options

available do not meet their daily mobility needs. Public transportation is not available in many areas and where available, may be insufficient given daily time constraints, the need to traverse multiple transit systems, or the need for transporting goods or equipment. To help mitigate these concerns, staff proposes to expand the alternative transportation mobility options that can be utilized with EFMP funding to include items such as car-sharing memberships and to expressly permit the option of splitting the incentives among several different travel modes (e.g. train, bus, paratransit, etc.) to better meet the participants' needs. The face value air districts would need to provide (at a minimum) for the Alternative Transportation Mobility Options incentive must be no less than the amounts listed in Table II-2. However, air districts are encouraged to pursue ways in which the incentives could be leveraged to provide a greater overall benefit to participants.

In addition, as with advanced-technology replacement vehicles, staff proposes that EFMP be coordinated with other state programs to maximize the benefits to participants taking advantage of these options. For example, one LCT-GGRF pilot program affecting alternative transportation mobility options is the Targeted Car Sharing in Disadvantaged Communities Pilot Program. The Targeted Car Sharing in Disadvantaged Communities pilot may allocate funding to establish hybrid and advanced clean car sharing and vanpool fleets in disadvantaged communities to offer an alternate mode of transportation and encourage the use of clean cars. The pilot would be used to gather data that could help support larger scale advanced technology car share programs.

## 5. Administration

To allow ARB to track pilot program implementation, air districts will be required to report to ARB a number of key metrics (e.g., participation and income levels served, etc.) on a quarterly basis. If those reports indicate that participation is low, then ARB and the air districts would jointly determine if changes were necessary and what they may be. To ensure air districts have the funding to properly administer the program, the proposed amendments allow a maximum of 10 percent of the total funding to pay for program administration and outreach, and an additional 5 percent of the total funding to engage partners or contractors specifically to support low-income populations.

Air districts must develop basic program requirements and agreements with participating dealers or financial institutions to ensure the intended incentives are being received by the consumer. The dismantler is subject to the existing BAR oversight protocols to ensure the vehicle turned into EFMP is scrapped.

## 6. Other Revisions

As with the retirement program, staff proposes a number of additional changes to simplify the program and expand potential participation, including clearly defining the documentation needed in the application (insurance documents, proof of California operation, registration, etc.) and allowing the participation of vehicles with salvage titles, provided they are currently registered.

## 7. Pilot Models

To help illustrate approaches that would be available under the proposed criteria, staff has identified three implementation models (described below) that hold promise to increase participation in the EFMP Pilot Replacement program. While ARB proposes specific minimum program requirements and are responsible for program review, the air districts will have the flexibility to choose an approach that is best suited for their district. Each model would include outreach in environmental justice communities and provide provisions for targeting high emitting vehicles with remaining useful life.

### a) Event-Driven Model

This model utilizes infrastructure from existing community events in low-income and disadvantaged communities. Staff believes a pilot replacement program can be integrated into existing events. For example, San Joaquin Valley Air Pollution Control District (SJVAPCD) already hosts Tune-In Tune-up events biweekly throughout the San Joaquin Valley geared toward repair assistance of high-emitting vehicles where the focal point of outreach are low-income motorists. The program could potentially be expanded to include vehicle retirement and replacement. The event-driven model also provides an opportunity for access to other facets of a sustainable replacement vehicle such as low-interest loans, financial counseling, and low-cost vehicle insurance.

### b) Dealer-Driven Model

Under this model, outreach and function of the program could be moved to an arena where people are already motivated to make a change: the vehicle dealership. The proposed model would incentivize everyone at the dealership who has an older vehicle to make a cleaner replacement choice. All older vehicles could be eligible for retirement with an additional tiered incentive for purchase of more environmentally friendly replacement vehicles. This approach could be coordinated with other programs such as CVRP and the LCT-GGRF pilot programs to maximize opportunity for low-income participants.

Many vehicles sold to dealerships as trade-ins are relatively high emitters due to age and also have significant useful life remaining and thus make good candidates for EFMP retirement. Dealerships typically purchase these vehicles for less than retail resale value and the vehicle is subsequently sold into another household. Those vehicles could be intercepted at a price that is advantageous to both the dealer and the consumer and scrapped instead of eventually returning to the road under new ownership. This model would significantly streamline program implementation.

### c) Financial Institution-Driven Model

Many low-income California motorists lack the credit worthiness to qualify for financing for newer, cleaner replacement vehicles and often purchase older, higher-polluting vehicles with cash or financing through dealerships with high loan rates. Participation in EFMP could break the cycle of low-income motorists purchasing older

replacement vehicles simply because they are the only option available due to financial constraints.

This model could incorporate a network of financial institutions capable of providing pre-approved low-interest financing, financial counseling, and other assistance to low-income motorists that may not be available through a traditional loan process. Once pre-approval is obtained, participants would redeem the voucher at any licensed dealership, which would provide a larger pool of dealership options and replacement vehicles.

These models are presented as examples only. Staff does not intend to limit implementation to one of the models described above. The fundamental aspect of the staff's proposal is that air districts have the flexibility to develop and refine a program that works for their air quality needs and low-income constituents.

### C. Rationale Supporting Amendments to EFMP Regulations

This proposal is intended to address the findings of the 2013 EFMP review and address the clear directives of SB 459. The proposed changes will improve EFMP by providing greater focus on low-income residents, promote the use of cleaner and more efficient replacement vehicles and enhance the emission benefits of the current program.

## III. PROPOSED ACTION

Staff recommends that the Board adopt the proposed amendments in this Initial Statement of Reasons. It must be recognized that the issue of incentivizing vehicle retirement and replacement is complex, with many complicating factors. Because of this, staff proposes that a review of the program occur by the end of June 2015, to determine program effectiveness and to recommend modifications as appropriate.

## IV. AIR QUALITY

The overall program is expected to reduce smog-forming emissions by 1.4 tons per day. A more detailed analysis of the estimated emission benefits is provided in Appendix D. Under current funding, staff expects total retirements of 18,000 vehicles each year. It is anticipated that the retirement and replacement element will provide incentives for approximately 700 participants divided equally in the South Coast and San Joaquin Valley air basins.

Table IV-1: Estimated Emission Benefits details the estimated oxides of nitrogen (NOx) and hydrocarbon (HC) reductions for both the Retirement-only and Pilot Retire and Replace portions of EFMP. The majority of the program's benefits will be derived from the retirement of older vehicles and subsequent replacement with newer,

cleaner vehicles. While the emission benefits are greater on a per vehicle basis for vehicles receiving a replacement incentive, there are far fewer vehicles funded through the Pilot Retire and Replace Program.

**Table IV-1: Estimated Emission Benefits**

	<b>Vehicles</b>	<b>NO<sub>x</sub> and HC (tons per day)</b>
Retirement-only	18,000	1.3
Pilot Retire and Replace	700	0.1
	18,700	1.4

As the program matures and participation increases, staff anticipates that the greenhouse gas reductions achieved by the EFMP will increase, but at this time, the effect is minimal. In the Retirement-only program, there is no guarantee that as to what specifically will be used in place of the retired vehicles. Therefore, staff has assumed that the consumers will replace them with vehicles that on average look like the fleet as a whole. Since the federal corporate average fuel economy requirements remained unchanged for several years, there is at the current time little impact of this element on greenhouse gas emissions. The Retire and Replace program steers participants to replacement choices that are better than the fleet average, and thus produce a greater greenhouse gas benefit per vehicle, but the number of vehicles replaced is small. However, as the composition of the fleet as a whole becomes more fuel efficient and the participation in the Retire and Replace increases, the greenhouse gas reductions achieved will increase.

## **V. ENVIRONMENTAL IMPACTS ANALYSIS**

### **A. Introduction**

That portion of ARB’s regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans for the protection and enhancement of the State’s ambient air quality has been certified by the Secretary for Natural Resources pursuant to Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA Guidelines section 15251(d)). Public Resources Code section 21080.5 exempts public agencies with certified regulatory programs from certain CEQA requirements, including but not limited to, preparing environmental impact reports, negative declarations, and initial studies. Under its certified program, ARB as a lead agency prepares a substitute environmental document (referred to as an Environmental Analysis or EA) as part of the Staff Report to comply with CEQA’s goals and policies and to provide public review of the analysis. (California Code of Regulations, title 17, sections 60000 – 60008).

## B. Proposed Amendments

ARB staff has determined the proposed regulatory amendments to the EFMP are exempt from the requirements of CEQA, as described in CEQA Guidelines §15061, because the action is both an Action Taken by Regulatory Agencies for Protection of the Environment (as described in CEQA Guidelines §15308 for “class 8” exemptions), and it is also exempt as described in CEQA Guidelines §15061(b)(3) (“common sense” exemption) because it can be seen with certainty that there is no possibility that the proposed action may result in a significant adverse impact on the environment.

The EFMP is a voluntary accelerated vehicle retirement or “car scrap” program that provides monetary incentives to vehicle owners to retire older, more polluting vehicles. There is no change to the overall funding of the program, but the proposed amendments aim to increase the participation of low-income motorists and offer additional financial incentives for advanced technology as directed in SB 459. This is expected to reduce the number of vehicles scrapped by directing more of the available funding toward the purchase of more reliable, efficient, and cleaner vehicles by participants who would not otherwise have the opportunity to purchase a cleaner vehicle. The proposed amendments would not require any new actions that could affect the physical environment and result in significant adverse impacts to the environment. After the amendments are adopted, a Notice of Exemption will be filed with the Office of Planning and Research and the Secretary for Natural Resources for public inspection.

## C. Alternatives Considered

No alternative considered by the agency would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective or less burdensome to affected private persons than the proposed regulation

### 1. No Change

This alternative was rejected because leaving the program as is would fail to address the program issues identified in the program study and would not be responsive to the requirements of SB 459.

### 2. Immediately Increase Retirement Incentive Amounts

This alternative was rejected because evidence suggests that the current retirement incentive levels are less than needed to attract operational vehicles with remaining useful life into the program. An increase in the incentive amount was considered to better reflect the actual value of vehicles intended to be captured by the program. Larger incentives that reflect both the market value of an operating vehicle and the added cost of a Smog Check ASM test could improve the program by providing a better balance between remaining useful life, vehicle value, and cost-effectiveness.

However this alternative was rejected because increasing the basic incentive for retirement would lower consumer participation, negatively affect cost-effectiveness,

and affect other existing retirement programs, in particular, CAP. As noted above, the proposal does allow for adjustment in the incentive values, if the data suggests that participation has dropped significantly. Similarly, the value for Retire and Replace incentives could be increased under the proposal provided the participation data supports it.

### 3. Allow Moderate Income to Participate in Retirement

This alternative was rejected because staff believes that limiting the retirement-only portion of EFMP to low-income consumers is consistent with the goals set forth in SB 459 to increase access to funding for low-income motorists and disadvantaged communities. The initial decrease in the eligible pool of participants is mitigated by the fact that the retirement-only portion of the program is over-subscribed and the proposed amendments provide a mechanism to adjust incentive amounts and income eligibility based on quarterly participation reports if necessary.

## VI. ENVIRONMENTAL JUSTICE

State law defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. ARB is committed to making environmental justice an integral part of its activities. The Board approved its Environmental Justice Policies and Actions (Policies) on December 13, 2001, to establish a framework for incorporating environmental justice into ARB's programs consistent with the directives of State law (CARB 2001). These policies apply to all communities in California, but recognize that environmental justice issues have been raised more in the context of low-income and minority communities.

As directed by SB 459, the proposed amendments to EFMP focus program incentives primarily toward low-income consumers and disadvantaged communities. As proposed, the retirement-only portion of the program would be restricted to low-income participants statewide while retirement and replacement incentives would be limited to only low- and moderate-income consumers (those with incomes of less than 400 percent of the Federal Poverty Level). Moreover, low-income eligible participants taking advantage of the replacement incentive would receive a higher voucher amount and be able to choose from a wider pool of replacement vehicles than moderate-income consumers.

The proposed event-driven model for Retire and Replace is designed to leverage the infrastructure of existing community events in low-income and disadvantaged communities. As mentioned above, SJVAPCD currently funds weekend events throughout the San Joaquin Valley providing repair assistance of high-emitting vehicles with focused outreach to low-income motorists and has indicated it will work to expand these events to include vehicle retirement and replacement. These events provide an opportunity to leverage existing community development organizations that provide families striving to gain greater economic self-sufficiency with a



combination of personal focused financial education, low-interest loans for reliable vehicles, and case management to support the success during the loan repayment program.

## **VII. ECONOMIC IMPACTS ANALYSIS/ASSESSMENT**

### **A. Potential Cost Impacts of the Proposed Regulation**

The proposed amendments do not significantly affect or otherwise alter the economic benefit that businesses have received or will continue to receive from their participation in voluntary incentive programs for EFMP. There are no compliance costs because EFMP is a voluntary incentive program and does not require mandatory participation by businesses. The proposed amended regulation will not adversely impact California businesses or consumers since they will participate only if it is financially beneficial. Businesses that may be slightly affected by the changes to the existing program include licensed dismantlers and car dealerships, as increased incentives per vehicle will slightly reduce the number of vehicle retired and also replaced. These impacts are short-term; over the long-term there are no economic impacts to either dismantlers or dealers. This is because EFMP could cause an infusion of activity, especially as the program is rolled out in focused areas. Given the scale of normal vehicle attrition or purchase these effects would be early, not necessarily extra, and would likely even out over time. In addition, the funds sunset in 2023.

The proposed amendments cause no additional work load or cost increases for BAR, SCAQMD, SJVAPCD or ARB, as these agencies are already implementing and plan to continue to implement these programs. Furthermore, EFMP guidelines provide funding for administration of the program to air districts.

#### **1. Alternatives: Impact on Small Business**

The Board has not identified any alternatives that would lessen any adverse impact on small business.

2. No alternative considered by the agency would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective or less burdensome to affected private persons than the proposed regulation.

### **B. Major Regulations**

HSC Section 57005 requires ARB to perform an economic impact analysis of submitted alternatives to a proposed measure before adopting any major regulation. A major regulation is defined as a regulation that will have a potential cost to California business enterprises in an amount exceeding \$10 million. Staff estimates

the cost of the proposed amendments to California is significantly less than \$10 million and is therefore not a major regulation.

### C. Significant Adverse Economic Impact Directly Affecting Business

EFMP was implemented beginning in 2010 and has funding through the end of 2024<sup>14</sup>. The threshold for determining a significant adverse economic impact is \$1,000,000 per year; staff projects that the financial impacts to the existing program will be less than \$1,000,000 annually to dismantlers and car dealerships. Based on the directives of SB 459, the proposal would positively impact low-income consumers by limiting retirement funding to their participation.

Businesses that may benefit include those dismantlers participating in the EFMP Retirement-only program and car dealerships. For dismantlers that are not participating in the Retirement-only program, the amended program will slightly decrease the total number of vehicles retired annually, whereas for car dealerships, it is expected to modestly increase vehicle sales by increasing the number of vehicles replaced. This modest increase for car dealerships will not be great enough to result in the expansion of current businesses.

This regulation amends existing regulations for the scrapping and replacement of vehicles. Therefore, the regulation is not expected to have any effect on the creation or elimination of jobs. The regulation is also not expected to affect the creation or elimination of any businesses.

Cost-effectiveness is a metric used to ensure that public funds are well spent and achieve the maximum air quality benefit. As an example, the Carl Moyer Program Incentives Program limits projects to those not exceeding a cost-effectiveness of \$17,720 per weighted ton of HC, NOx and particulate matter reduced. AB 118 directs that cost-effectiveness be considered, but does not specify a cost-effectiveness limit.

Table VII-1: Estimated Cost Effectiveness summarizes the cost-effectiveness for both retirement and typical replacement scenarios. Cost-effectiveness will vary and depend on the age of the retired vehicle, whether a voucher is used, and in cases where additional incentives are provided for low-income participants. As shown, cost effectiveness is estimated to range from \$19,000 per ton for retirement-only to as much as \$43,000 per ton for Pilot Retire and Replace for a low-income consumer purchasing a 35 mile per gallon vehicle. As discussed above, roughly 90 percent of the funding is allocated to Retirement-Only, so overall cost-effectiveness is greatly skewed toward that element's cost-effectiveness and is estimated to be \$20,000 per ton. The assumptions used to weight the average replacement cost-effectiveness and a detailed explanation of the methodology are contained in Appendix E.

---

<sup>14</sup> AB 8, Perea. Alternative Fuels and Technology: Funding Programs.

**Table VII-1: Estimated Cost Effectiveness**

Consumer Replacement Option	Retirement-Only	Pilot Retire and Replace	Dollar per ton (NO <sub>x</sub> + HC)
Low-Income	\$1,500	N/A	\$19,000
Low-Income < 8 yr old	\$0	\$4,000	\$39,000
Low-Income 35 MPG	\$0	\$4,500	\$43,000
Moderate-Income 35 MPG	\$0	\$3,500	\$34,000
Moderate-Income ZEV	\$0	\$3,500 + \$2,500* = \$6,000	\$40,000
Overall Program			\$20,000

\*This incentive amount represents an estimated contribution from LCT-GGRF Plus-up pilot. Actual incentive amount would be discussed by the LCT workgroup.

**D. Justification for Adoption of Regulations Different from Federal Regulations Contained in the Code of Federal Regulations**

This proposed regulation is unique; there are no similar federal regulations contained in the Code of Federal Regulations.

**E. Benefits of the Proposed Regulation**

The majority of the program’s benefits will be derived from the retirement of older vehicles and subsequent replacement with fleet average vehicles. The overall program is expected to reduce smog-forming emissions by 1.4 tons per day. Reduction of smog-forming emissions will result in health benefits to the public by reducing instances of smog-related medical problems, including asthma and other respiratory ailments. Reduction in smog-related medical issues also reduces related costs, such as emergency room visits and other medical costs.

**VIII. Summary and Rationale for Each Regulatory Provision**

A summary of the proposed regulation elements and their rationale is provided below. The proposed regulatory text to amend title 13, California Code of Regulations, sections 2620-2630 is contained in Appendix A.

#### A. Section 2620 Purpose

Summary: The purpose of the regulation is to provide guidelines to implement the AB 118 EFMP to improve California air quality through the voluntary early retirement of vehicles as directed by the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007 (AB 118, Statutes of 2007, Chapter 750; Health and Safety Code sections 44125-44126) section 44125(a). This section is needed for continued statewide implementation of the Retirement-Only portion of EFMP as well as development of the targeted Pilot Retire and Replace Program implemented by SJVAPCD and the SCAQMD as directed by SB 459.

Rationale: Describes authority and context for regulation.

#### B. Section 2621 Definitions

Summary: This section provides definitions of the terms used in the regulation and is needed to provide clarity and support for the requirements presented within the proposed regulation. Many of the definitions are unique to this proposed regulation, but where possible the definitions come from existing regulations and state and federal guideline documents.

Rationale: Many of the definitions are unique to this proposed regulation.

#### C. Section 2622 Program Administration

Summary: This section outlines administration requirements for both the Retirement-Only and Pilot Retire and Replace portions of EFMP. The proposed regulation specifies that the retirement-only portion will be implemented by BAR and the Pilot Retire and Replace portion will be implemented by the SJVAPCD and SCAQMD. All implementing agencies may contract with third parties including dismantlers to facilitate implementation of the EFMP and are required to report program participation and performance to ARB quarterly.

Rationale: These administration provisions are necessary for carrying out the purpose of the authorizing statute. Health and Safety Code section 44125 requires the program to be focused where the greatest air quality impact can be identified. The San Joaquin Valley and the South Coast Air Basin are the areas in the state with the most severe air pollution. In addition, South Coast and San Joaquin Valley air districts already have vehicle scrap programs in operation similar to the regulation being amended. Health and Safety Code section 44125(c)(8) requires “streamlined administration” and “accountability of moneys spent.” The quarterly reporting enables ARB to monitor “accountability of moneys spent.”

#### D. Section 2623 Program Limits

Summary: The text in this section provides the means to quickly adjust program requirements should the initial requirements decrease program participation and provides firm limits for those adjustments to the incentive amounts. The criteria for

adjusting the incentive amounts are based on quarterly reporting of program performance. Should program participation fall more than 15 percent below the previous year's average level, incentive amounts and eligibility requirements can be administratively adjusted by the ARB Executive Officer after at least one public workshop in each implementing air district.

Rationale: This section is needed to provide needed flexibility in the proposed regulation to support implementation of the Pilot Retire and Replace program and carry out the purpose of the authorizing statute. This section allows ARB to respond in a timely manner if a shift of resources is warranted by the levels of participation in the respective districts. It also allows ARB to monitor the effectiveness of the districts' outreach activities.

#### E. Section 2624 Retired Vehicle Minimum Eligibility Requirements

Summary: The retired vehicle eligibility criteria section provides eligibility criteria and requirements for all vehicles to be retired through EFMP, including those participating in the Pilot Retire and Replace program.

Rationale: This section is needed to clearly define the eligibility criteria required to retire vehicles through EFMP, which includes some form of a functionality test to ensure that vehicles have sufficient functionality to be driven on the road. The functionality requirement is necessary to ascertain that the program is retiring vehicles that have useful life remaining, rather than vehicles that would be retired anyway because they are at the end of their useful lives. Retiring vehicles that have no useful life remaining does not result in a worthwhile and cost-effective air pollution benefit.

#### F. Section 2625 Ineligible Vehicles

Summary: This section describes vehicles that are not eligible for participation in either the Retirement-Only or the Pilot Retire and Replace portions of EFMP. This section is needed to clearly define the types of vehicles that do not meet the minimum participation requirements of the program.

Rationale: These provisions are designed to specifically ensure that all vehicles participating in the program are privately owned and being driven in California.

#### G. Section 2626 Retirement-Only Program

Summary: This section provides the minimum eligibility requirements to participate in the statewide Retirement-Only portion of EFMP. Applications must be submitted with original signatures to BAR and the applicant must be the registered owner and hold the title for the vehicle. All vehicles must meet all the requirements of both this section and the retired vehicle eligibility requirements including completing a Smog Check test and passing the visual inspection required by CAP. The Retirement-only portion requires separately defined guidelines and requirements to align with CAP and to ensure that vehicles are dismantled at BAR contracted dismantlers.

Rationale: This section carries out the purpose of the authorizing statute by ensuring vehicles are dismantled at BAR contracted dismantlers. Health and Safety Code section 44125(c)(3) requires the vehicles to be continuously registered or primarily driven in California for two years prior to acceptance for the program. This section makes specific the statute's requirements and how they may be proved. Health and Safety Code section 44125(c)(7) requires that these regulations coordinate with the vehicle retirement and replacement components of the Bureau of Auto Repair's Consumer Assistance Program.

#### H. Section 2627 Pilot Retire and Replace Program

Summary: This section provides the minimum implementation criteria for EFMP Pilot Retire and Replace Program. Implementing air districts must submit an implementation proposal to ARB prior to receiving initial grant disbursements. These proposals must include methods for targeting high-emitting vehicles, ensuring that retired vehicles have sufficient functionality to be driven, and that the program incorporates some form of consumer protections.

Rationale: This section is to provide minimum criteria that must be met by both air districts, yet leave enough flexibility to address regional implementation needs and the experimental nature of a pilot program. Because this is a pilot program, the air districts need flexibility to try different approaches to see what will work for them. For example, a method for targeting high-emitting vehicles that works for primarily urban South Coast may not work for the more rural San Joaquin Valley. Thus the districts need flexibility to change their methods quickly to ensure the timely implementation of the statute.

#### I. Section 2628 Parts Recycling and Resale

Summary: This section provides requirements to dismantlers and other contractors accepting vehicles for retirement under EFMP. This section prohibits dismantlers and other contractors from removing emission or drive train related parts from retired vehicles. Vehicles and all activities associated with retiring them must be conducted in accordance with all local, state, and federal laws.

Rationale: This section is needed to ensure that emission reductions gained through the program are real and that parts from retired vehicles are not sold and re-used. It also ensures that the dismantling process is conducted legally, minimizing adverse environmental impact.

#### J. Section 2629 Records and Auditing

Summary: This section provides record keeping requirements for dismantlers and air districts implementing EFMP.

Rationale: This section is required so that records are kept to track and evaluate program participation and performance.

## K. Section 2630 Severability

Summary: This section defines each section of the proposed regulation as severable and is needed to clearly define that if one provision within the proposed regulation is deemed invalid, the remaining parts are still deemed to be valid.

Rationale: This section preserves regulations to carry out purpose of authorizing statute, even if one section of th regulation is deemed invalid.

## IX. PUBLIC PROCESS FOR DEVELOPMENT OF PROPOSED ACTIONS (PRE-REGULATORY INFORMATION)

This section describes the public process conducted by ARB during the development of the proposed regulation. ARB conducted a workshop series and met with stakeholders to present a proposal and solicit public input.

An informational report was presented to the Board in November 2013, indicating issues identified during an assessment of the program and potential areas of improvement. Subsequently, workshops were held in series on March 4-6, 2014 in Diamond Bar, Fresno, and Sacramento. The Fresno workshop included video telecast to Bakersfield and Modesto and the Sacramento workshop was webcast to increase participation. At these workshops, staff provided background information; proposed revisions to both the Retirement-Only and Pilot Retire and Replace programs; reviewed potential pilot program models and consumer protections; and the next steps in the regulatory process.

Notices of the workshop were sent via the electronic EFMP list serve and the general Mobile Source Mailings list serve and are posted on the respective webpages<sup>15, 16</sup>. ARB also posted the workshop material on its EFMP webpage<sup>13</sup>.

In addition to the public workshops, ARB staff worked extensively with nonprofits interested in issues where income and transportation needs intersect. Concepts like vehicle affordability, reliability and safety, and alternative transportation mobility options were discussed. ARB staff attended SJVAPCD's Tune-In Tune-Up events hosted by Valley Clean Air Now to better understand how the logistics of a vehicle repair program using community-based outreach and local business partners may be leveraged into a replacement program.

---

<sup>15</sup> <http://www.arb.ca.gov/msprog/aqip/efmp/efmp.htm>

<sup>16</sup> [http://www.arb.ca.gov/msprog/mailouts/mouts\\_14.htm](http://www.arb.ca.gov/msprog/mailouts/mouts_14.htm)

## X. REFERENCES

- ARB, 2013. EMFAC2011. Air Resources Board <http://www.arb.ca.gov/emfac/> (accessed March 2014)
- ARB, 2013. *Staff Report: Enhanced Fleet Modernization Program Assessment*. November 19, 2013  
[http://www.arb.ca.gov/msprog/aqip/EFMP\\_Update\\_Staff\\_Report\\_November\\_2013.pdf](http://www.arb.ca.gov/msprog/aqip/EFMP_Update_Staff_Report_November_2013.pdf) (accessed March 2014)
- LKQ, 2014. *LKQ Pick Your Part, Ontario Vehicle Inventory*. 2014.  
[http://www.lkqpickyourpart.com/locations/LKQ\\_Pick-A-Part\\_-\\_Ontario-280/recents/](http://www.lkqpickyourpart.com/locations/LKQ_Pick-A-Part_-_Ontario-280/recents/) (accessed January 2013)
- BAR, 2010. *Vehicle Test History Database*. Bureau of Automotive Repair, 2010.  
<http://www.bar.ca.gov/pubwebquery/vehicle/pubtstqry.aspx> (accessed January 2013)
- Autotrader, 2013. *Automotive Marketplace*. TPI Holdings, Inc.  
<http://www.autotrader.com/> (accessed May-July 2013)
- Craigslist, 2013. *Los Angeles, Riverside, San Bernardino, and Orange Counties*. 2013  
<http://losangeles.craigslist.org/> (accessed May-July 2013)
- HHS, 2014. *2014 Federal Poverty Guidelines*. U.S Department of Health & Human Services. January 2014  
<http://aspe.hhs.gov/poverty/14poverty.cfm> (accessed February 2014)
- BLS, 2013. *Consumer Expenditures for the Los Angeles Area: 2011-2012*. Bureau of Labor Statistics, September 10, 2013. <http://www.bls.gov/news.release/pdf/cesan.pdf> (accessed February 2014)
- Census, 2012. *Average Annual Expenditures of All Consumer Units*. U.S. Census Bureau, 2012  
<https://www.census.gov/compendia/statab/2012/tables/12s0684.pdf> (accessed February 2014)
- Edmunds, 2014. *True Cost To Own Calculator*. Edmunds.com, Inc, 2014.  
<http://www.edmunds.com/tco.html> (accessed February-March 2014)
- DMV, 2010. *Vehicle Registration Fee Calculator*. California Department of Motor Vehicles, 2010. <https://www.dmv.ca.gov/FeeCalculatorWeb/newVehicleForm.do> (accessed March 2014)
- FTC, 2014. *Consumer Sentinel Network Data Book for 2013*. Federal Trade Commission, February 2014. California, page 26.  
<http://www.ftc.gov/system/files/documents/reports/consumer-sentinel-network-data-book-january-december-2013/sentinel-cy2013.pdf> (accessed March 27, 2014)



BBB, 2012. *2012 Statistics Sorted By Industry*. Better Business Bureau, 2012. Auto Dealers new and used, page 5.  
<http://www.bbb.org/storage/0/Shared%20Documents/complaintstats/USSTATSBYINDUSTRY.pdf>  
(accessed March 27,2014)

ARB, 2011. *The Carl Moyer Program Guidelines Approved Revision 2011: Appendix C: Cost-Effectiveness Calculation Methodology*. Air Resources Board, April 2011.  
[http://www.arb.ca.gov/msprog/moyer/guidelines/2011gl/2011cmp\\_appc\\_4\\_28\\_11.pdf](http://www.arb.ca.gov/msprog/moyer/guidelines/2011gl/2011cmp_appc_4_28_11.pdf)  
(accessed March 2014)

ARB, 2009. *Staff Report: Regulations for the Enhanced Fleet Modernization Program*. June 25, 2009. <http://www.arb.ca.gov/regact/2009/carscrap09/carscrapisor.pdf>  
(accessed February 2014)

**APPENDIX A  
PROPOSED REGULATION ORDER**

## **Appendix A – Proposed Regulation Order**

### **Regulation for AB 118 Enhanced Fleet Modernization Program**

NOTE: Set forth below is proposed amendments to title 13, of the California Code of Regulations. Amendments to existing sections proposed and subject to comment in this rulemaking are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions.

Amend title 13, California Code of Regulations, sections 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630 to read as follows:

#### **Article 2. AB 118 Enhanced Fleet Modernization Program**

##### **§ 2620. Purpose.**

The purpose of this regulation is to improve California air quality through the voluntary early retirement of vehicles as directed by the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007 (Assembly Bill 118, Statutes of 2007, Chapter 750; Health and Safety Code sections 44125-44126) section 44125(a). Vehicle owners who meet certain eligibility requirements are offered the following:

- (a) Payment for the voluntary retirement from operation of a motor vehicle and/or;
- (b) Additional payment, ~~in the form of a voucher, to owners of targeted vehicles~~ for the purchase of a replacement vehicle meeting emission and/or model year requirements, ~~if they to a vehicle owner who voluntarily retires a targeted vehicle.~~ A district administering a ~~voucher replacement~~ program may offer this additional payment ~~in the form of a voucher~~ for alternative transportation mobility options such as public transportation and/ or car sharing in lieu of a ~~voucher for the purchase of a replacement vehicle.~~

NOTE: Authority cited: 39600, 39601 and 44125, Health and Safety Code. Reference: Sections 39600, 39601 and 44125, Health and Safety Code.

##### **§ 2621. Definitions.**

- (a) **“ARB” or “Board”** means the California Air Resources Board.
- (b) **“BAR” or “Bureau”** means the Bureau of Automotive Repair in the Department of Consumer Affairs.
- (c) **“Consumer Protections”** means any method, provision, or requirement designed to ensure that program participants accrue the full benefit of the incentives offered through the program.

(e)(d) **“Dismantle”** means to, crush, stamp, shred, or otherwise render permanently and irreversibly incapable of functioning as originally intended, any vehicle or vehicle part.

(d)(e) **“Dismantler”** means the person or business, defined and licensed according to the requirements of California Vehicle Code sections 220,221,11500, et seq., and other business codes and the regulations of the Department of Motor Vehicles (DMV), who under contract with BAR dismantles or otherwise removes from service those vehicles obtained in the Enhanced Fleet Modernization Program.

(e)(f) **“District”** means a local air quality management district or air pollution control district, as defined by California Health and Safety Code, Part 3, Section 40000 et seq., which has responsibility for administering air pollution control programs.

(f)(g) **“Drive Train Parts”** means all parts associated with the drive train such as engine, drive mechanism, transmission, differential, axles, and brakes.

(g)(h) **“EFMP”** means the Enhanced Fleet Modernization Program.

(h)(i) **“Emissions-Related Part”** means any vehicle part which affects any regulated emissions from a vehicle that is subject to California or federal emissions standards and includes, but is not limited to, those parts specified in the “Emissions-Related Parts List,” adopted by the State Board on November 4, 1977, as last amended June 1, 1990.

(i) ~~“Income Eligible” means a person whose income does not exceed 225 percent of the federal poverty level, as published quarterly in the Federal Register by the United States Department of Health and Human Services.~~

(j) ~~“Solicited Vehicle” means a vehicle identified by the Bureau and the Board and solicited by the Bureau for participation in the EFMP retirement program. These vehicles are identified by probability of being a high polluting vehicle. Solicited vehicles include: all pre-1976 model year vehicles; diesel vehicles; and additional vehicles identified by analysis of the data generated by the Smog Check program.~~

(j) “Federal Poverty Level” or “FPL” means the income level published in the poverty guidelines which are updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2).”  
The guidelines are a simplification of the poverty thresholds for use for administrative purposes — for instance, determining financial eligibility for certain federal programs.

(k) “Functionality Test” means a method for determining that a vehicle has sufficient functionality to be driven on road.

(k) ~~“Targeted Vehicle” means a vehicle identified by the Bureau, the Board, or the district to be eligible for a voucher and retirement under the EFMP. These vehicles are identified by probability of being a high polluting vehicle. Targeted vehicles include: all~~

~~pre-1976 model year vehicles; diesel vehicles; and additional vehicles identified by analysis of the data generated by the Smog Check programs or vehicles identified by other means accepted by the Board, such as remote sensing. Targeted vehicles identified by analysis of emissions data will have a higher probability of high emissions than solicited vehicles; targeted vehicles are a subset of solicited vehicles.~~

~~(l) **“Voucher”** means a document with a specified redemption value issued by the district, and redeemed at a vehicle dealer for the purchase of a replacement vehicle meeting emissions and/or model year requirements or redeemed at a public transit agency for the purchase of transportation.~~

~~(l) **“Hybrid Vehicle”** means a vehicle with two or more distinct power sources on the drive train.~~

~~(m) **“Alternative Transportation Mobility Option”** means additional methods of transportation including but not limited to: public transportation passes, car sharing memberships, or a combination thereof.~~

~~(n) **“Plug-In Hybrid Vehicle”** means a vehicle that can be driven solely by an electric motor without consuming any gasoline, and with batteries that can be recharged by plugging it into a wall outlet.~~

~~(o) **“Zero-Emission Vehicle”** means a vehicle which produces no emissions from the on-board source of power.~~

NOTE: Authority cited: 39600, 39601 and 44125, Health and Safety Code. Reference: Sections 39600, 39601, 44062.1 and 44125, Health and Safety Code

## **§ 2622. Program Administration.**

~~(a) The Enhanced Fleet Modernization Program retirement-only portion shall be administered by the Bureau through contracts with dismantlers, ~~districts~~, and other appropriate entities as necessary.~~

~~(b) The Bureau may contract annually with local air pollution control districts to administer the voucher portion of the EFMP. Districts may use up to 5% of program funds to recover administrative costs incurred.~~The Enhanced Fleet Modernization Program Retire and Replace program shall be administered by the San Joaquin Valley Air Pollution Control District and the South Coast Air Quality Management District. The Districts may contract with dismantlers, dealerships, financial institutions, and other appropriate entities as necessary.

~~(c) The Bureau shall coordinate annually with the Board to determine the appropriate budget for the ~~voucher~~ Retire and Replace program, given past performance.~~

~~(d) The Bureau and the Districts shall submit quarterly reports to ARB detailing program participation and performance. At a minimum the Bureau report shall include items (1) and (2), while the District reports shall include items (1) through (6) below:~~

(1) Program participation rates

(2) Retired vehicle information, including make, model, model year, license number, mileage at retirement and registration status at retirement

(3) Replacement Vehicle Information, including make, model, model year, license number, and mileage at time of purchase

(4) A summary of the incentives delivered, by demographic categories established in section 2627 (l)

(5) A summary of feedback received from participants, including those participants that ultimately did not receive any incentive, if available.

(6) Copies of any reports from District contractors or partner agencies concerning the performance of the program, if appropriate.

NOTE: Authority cited: Sections 39600, 39601 and 44125, Health and Safety Code. Reference: Sections 39600, 39601, and 44125, Health and Safety Code.

### **§ 2623. Program Limits.**

~~An applicant determined to be eligible under the Enhanced Fleet Modernization Program may receive the following assistance:~~

(a) Retirement Program: If the quarterly reports indicate that participation in the EFMP retirement program is insufficient to enable expenditure of the funds by the end of the fiscal year, or if participation has dropped more than 15 percent below the average level of participation for the same quarter of the previous year, the Executive Officer, in consultation with BAR, may administratively adjust the incentive amounts offered and eligibility requirements. Such an adjustment may be implemented only after a public workshop.

(b) Retire and Replace Program: If the quarterly reports indicate that participation in the EFMP Retire and Replace program is insufficient to enable expenditure of the funds by the end of the fiscal year, or if participation has dropped more than 15 percent below the average level of participation for the same quarter of the previous year, the Executive Officer, in consultation with the implementing Air Districts, may administratively adjust the incentive amounts offered and eligibility requirements. Such an adjustment may be implemented only after at least one public workshop in each implementing Air District.

(c) Should the program incentive amounts be modified, the maximum incentive amounts for the Enhanced Fleet Modernization Program shall be limited as follows:

~~(a) For income eligible participants, payment of \$1,500.00 for each vehicle retired from operation at a dismantler operating under contract with BAR;~~

~~(b) For all other vehicle owners, payment of \$1,000.00 for each vehicle retired from operation at a dismantler operating under contract with the Bureau of Automotive Repair;~~

~~(c) Once the dismantler has purchased the vehicle, the consumer's eligibility status or the amount paid to the consumer cannot change.~~

Targeted Vehicles may also qualify for:

~~(d) Payment, in the form of a voucher, of \$2,000.00 toward the purchase of a replacement vehicle four years old or newer, or up to \$2,000.00 toward the purchase of transportation by a public transit agency; or~~

~~(e) For income eligible participants, payment, in the form of a voucher, of \$2,500.00 toward the purchase of a replacement vehicle eight years old or newer, or up to \$2,500.00 toward the purchase of transportation by a public transit agency.~~

(1) For eligible participants with household income less than or equal to 225% of FPL, payment, not to exceed \$2,500.00, for each vehicle retired from operation at a dismantler operating under contract with BAR

(2) For eligible participants with household income less than or equal to 225% of FPL, payment, not to exceed \$5,000.00, toward the purchase of a replacement vehicle eight years old or newer

(3) For eligible participants with household income less than or equal to 225% of FPL, payment, not to exceed \$5,500.00, toward the purchase of a replacement vehicle with a minimum 35 miles per gallon (mpg) fuel economy.

(4) For eligible participants with household income less than or equal to 225% of FPL, payment of \$5,500.00, toward the purchase of a hybrid, plug-in hybrid, or zero-emission replacement vehicle.

(5) For eligible participants with household income less than or equal to 225% FPL, payment of \$5,500.00, toward the purchase of alternative transportation mobility options.

(6) For eligible participants with household income greater than 225% of FPL and less than or equal to 300% of the FPL, payment not to exceed \$4,500.00 toward the purchase of a replacement vehicle with a minimum 35 miles per gallon (mpg) fuel economy.

(7) For eligible participants with household income greater than 225% of FPL and less than or equal to 300% of the FPL, payment, not to exceed \$4,500.00 toward the purchase of a hybrid, plug-in hybrid, or zero-emission replacement vehicle.

(8) For eligible participants with household greater than 225% of FPL and less than or equal to 300% of the FPL, payment, not to exceed \$4,500.00 toward the purchase of alternative transportation mobility options.

(9) For eligible participants with household income greater than 300% of the FPL and less than or equal to 400% of the FPL, payment, not to exceed \$3,500.00 toward the purchase of a hybrid, plug-in hybrid, or zero-emission replacement vehicle.

(10) For eligible participants with household income greater than 300% of the FPL and less than or equal to 400% of the FPL, payment, not to exceed \$3,500.00 toward the purchase of alternative transportation mobility options.

~~(f)~~(d) Consumers who have received federal funds EFMP incentives for a replacement vehicle may not receive funds under EFMP additional incentives toward the purchase of for the same vehicle, subject to the requirements of the other incentive program(s).

NOTE: Authority cited: Sections 39600, 39601 and 44125, Health and Safety Code. Reference: Sections 39600, 39601, 44062.1 and 44125, Health and Safety Code.

### **§ 2624. Retired Vehicle Minimum Eligibility Requirements.**

~~(a) In order to apply for participation in the EFMP, an individual must submit a completed application as specified at section 3394.6 of title 16 of Division 33, Article 11 of the California Code of Regulations, to BAR with original signature(s).~~

~~(b) (a) In order to participate in the EFMP, an individual must be the registered owner of the vehicle with vehicle title issued in their name, and t~~

(b) Vehicles that hold a salvage title are eligible for participation if registered at the time of application.

(c) The vehicle must meet one of the following requirements, as applicable:

~~(1) It shall be voluntarily sold to a Dismantler under contract with BAR;~~

(1)(2) It shall be currently registered with meet the DMV requirements as specified in sections 3394.4 (b)(6)(C) and 3394.4 (b)(6)(D) of Title 16 of Division 33, Article 11 of the California Code of Regulations as an operable vehicle and shall have been so registered continuously for at least 24 months prior to the postmarked date of application to an address or addresses within the state, or

~~(A) A vehicle may also be eligible if the owner of the vehicle placed the vehicle in planned non-operational status per Vehicle Code section 4604, et seq., for a total of 60 or fewer days during the continuous 24 months registration period and occurring at least 90 days prior to the postmarked date of application, or~~

~~(B) A vehicle may also be eligible if the registration has lapsed for fewer than 121 days during the previous 24 months, pursuant to Health and Safety Code section 44094, and all appropriate registration fees and late penalties have been paid to the DMV, provided that the vehicle is registered for at least 90 days immediately prior to the postmarked date of application;~~

~~(C) Determination of an individual vehicle's registration history shall be based on:~~  
~~1. Registration data for that vehicle obtained from DMV records; and~~



~~2. If (C)1 provides inconclusive results for an individual vehicle, then copies of the applicable vehicle registration certificates may be used;~~

~~(D)(2)~~ An unregistered vehicle may also be eligible if proven to have been driven primarily in California for the last two years and not to have been registered in any other state or country in the last two years. Documentation of operation in California includes the following:

~~1.(A) Proof of continuous insurance coverage for the last two years consecutive years preceding application to the EFMP, without lapses in insurance coverage totaling more than 120 days; or~~

~~2.(B) At least two invoice(s) from an Automotive Repair Dealer registered at the time of the repair with the Bureau pursuant to section 9884.6 of the Business and Professions Code (showing the following:~~

~~1. The Automotive Repair Dealer's valid registration number, as issued by the Bureau~~

~~2. The name and address of the Automotive Repair Dealer, as shown on the Bureau's records~~

~~3. Description of a repair or maintenance operation performed to the vehicle~~

~~4. The vehicle year, make, model, and vehicle identification number) for or license plate number matching the vehicle to be retired~~

~~5. The date of the vehicle repairs and/or repair or maintenance visit during the previous two years and proof of owner's residence in the state during the same period.~~

~~(C) Invoices submitted for the purpose of satisfying the requirements of section (B) shall be from two separate calendar years. The oldest invoice may not be older than twenty-four months prior to the date of application receipt.~~

~~(3) It shall be a vehicle with up to 10,000 pounds gross vehicle weight rating; including a passenger vehicle, truck, sports utility vehicle (SUV), or van;~~

~~(4) It may be operating under a Smog Check repair cost waiver or economic hardship extension issued pursuant to Health and Safety Code section 44017 or 44017.1;~~

~~(5) Vehicles that are tampered, pursuant to section 3340.41.5 of hold a salvage title 16, Division 33, Article 5.5 of the California Code of Regulations or Health and Safety Code section 43012, shall be are eligible acceptance into the EFMP program.~~

~~(c) Each vehicle shall pass the visual and operational inspection required by the Consumer Assistance Program, performed by the dismantler or BAR representative, and conducted on-site at the dismantler location. The inspection requirements for the Consumer Assistance Program are defined pursuant to sections 3394.4(c)(8) and~~

~~3394.4(c)(9) of title 16 of Division 33, Article 11 of the California Code of Regulations. Vehicles failing the inspection requirements may be re-inspected by the dismantler for compliance with these requirements at any time after modifications have been made to the vehicle to correct the deficiency(ies).~~

~~(d) An applicant shall not have retired another vehicle through the EFMP or the BAR Consumer Assistance Program within the preceding 12 month period; and a vehicle owner who is a joint owner of a vehicle shall not have retired more than two vehicles through the EFMP or BAR Consumer Assistance Program within a 12-month period.~~

(d) Vehicles shall be voluntarily dismantled at a Dismantler under contract with BAR;

(e) Vehicles shall be up to 10,000 pounds gross vehicle weight rating: including a passenger vehicle, truck, sports utility vehicle (SUV), or van;

(f) Vehicles must complete a functionality test to ensure that the vehicle is capable of being driven on the road. Examples of acceptable functionality tests include but are not limited to: smog check tests as defined in section 2626(g), or another demonstration of functionality such as the inspection requirements listed in section 2626(b).

NOTE: Authority cited: Sections 39600, 39601 and 44125, Health and Safety Code. Reference: Sections 39600, 39601 and 44125, Health and Safety Code.

### **§ 2625. Ineligible Vehicles.**

(a) A dismantled or salvaged vehicle that has not been reregistered pursuant to section 11519 of the Vehicle Code.

(b) A vehicle registered to a non-profit organization or a business.

(c) A vehicle operated by a public agency or fleet licensed and registered pursuant to Health and Safety Code sections 44019 and 44020.

(d) A vehicle being initially registered in California.

NOTE: Authority cited: Sections 39600, 39601 and 44125, Health and Safety Code. Reference: Sections 39600, 39601 and 44125, Health and Safety Code.

**§ 2626. Targeted Vehicles and Vehicle Solicitation Retirement-only Program.**

~~(a) The Bureau, the Districts, and the Board will solicit vehicles with the greatest potential for having the highest emissions for participation in the EFMP. BAR shall use existing vehicle emissions data to identify and solicit program participation beginning with vehicles with the highest emissions potential first. "Solicited vehicle" is defined pursuant to subdivision (j) of section 2621.~~

~~(b) The Bureau shall primarily focus outreach efforts and solicit vehicles in the South Coast and San Joaquin Valley air basins.~~

~~(c) The Board, the Bureau, and the Districts may solicit Targeted Vehicles as defined pursuant to subdivision (k) of section 2621 as appropriate for participation in the voucher portion of the EFMP.~~

(a) In order to apply for participation in the Retirement-only program of the EFMP, an individual must submit a completed application as specified at section 3394.6 of the title 16 of Division 33, Article 11 of the California Code of Regulations, to BAR with original signature(s).

(b) Each vehicle must pass the visual and operational inspection required by the Consumer Assistance Program, performed by the dismantler or BAR representative, and conducted on-site at the dismantler location. The inspection requirements for the Consumer Assistance Program are defined pursuant to sections 3394.4 (b)(7) and 3394.4 (b)(8) of title 16 of Division 33, Article 11 of the California Code of Regulations. Vehicles failing the inspection requirements may be re-inspected by the dismantler for compliance with these requirements at any time after modifications have been made to the vehicle to correct the deficiency(ies)

(c) In order to participate in the EFMP retirement program, an individual must have household income less than or equal to 225% of FPL.

(d) An applicant determined to be eligible under the retirement-only portion of the EFMP shall voluntarily sell the vehicle to the dismantler and may receive payment of \$1,500.00 for each vehicle retired from operation at a dismantler operating under contract with the Bureau.

(e) Once the dismantler has purchased the vehicle, the consumer's eligibility status or the amount paid to the consumer cannot change.

(f) Model year 1976 and newer vehicles must have successfully completed a Smog Check inspection (pass or fail) within 180 days of the date of application to the EFMP. A Smog Check inspection shall not include aborted, manual mode, or training mode tests. Vehicles exempt from the Smog Check program as defined in Title 16 of the California Code of Regulations section 3340.5 do not require a Smog Check inspection to qualify for the EFMP.

(g) An applicant shall not have retired another vehicle through the EFMP or the BAR Consumer Assistance Program within the preceding 12-month period; and a vehicle owner who is a joint owner of a vehicle shall not have retired more than two vehicles through the EFMP or BAR Consumer Assistance Program within a 12-month period.

NOTE: Authority cited: Sections 39600, 39601 and 44125, Health and Safety Code. Reference: 39600, 39601 and 44125, Health and Safety Code.

**§ 2627. ~~Vouchers~~ Pilot Retire and Replace Program.**

(a) ~~Vouchers~~ The Retire and Replace program will be offered in the South Coast and San Joaquin Valley air basins. The Bureau shall consult with the Board annually regarding the status of the ~~voucher~~ Retire and Replace program.

(b) ~~BAR or~~ The Board shall contract with the districts to administer the ~~voucher~~ pilot Retire and Replace program.

(c) The districts shall use not more than 10% of grant funds received to cover the cost of program administration.

(d) The districts may use an additional 5% of grant funds received to contract with third party entities to address issues associated with participation of lower-income consumers.

(e) The districts must submit a pilot Retire and Replace program implementation proposal to the Board prior to receiving initial grant disbursements.

(f) The pilot Retire and Replace program must include the following elements:

(1) Targeted outreach in low-income and disadvantaged communities. The program must target outreach and restrict program eligibility to motorists with household incomes of 400 percent of the federal poverty level or less. This does not prohibit outreach being conducted in conjunction with one or more other programs that are targeted at other populations.

(2) Methods for ensuring that retired vehicles have sufficient remaining useful life. The program must include a mechanism to ensure vehicles with sufficient functionality to be currently driven. This could include, but is not limited to, the completion of a smog check test.

(3) Methods to target high-emitting vehicles. The program must include a mechanism for targeting high-emitting vehicles to be retired. This could include, but is not limited to, emissions testing, remote sensing, determination of a model year limitation or other mechanisms.

(4) Methods for providing significant assistance to program participants to complete Retire and Replace transactions. This assistance could take the form of financial education, access to low cost loans, or other ways to address the challenges to vehicle ownership faced by low-income participants. ARB staff will

work with the Districts to enable coordination with light-duty low-carbon transportation funding to maximize participation opportunities for low-income participants.

(5) Consumer protections during the purchase and financing of the vehicle to ensure that the benefits of the incentives accrue to the final consumer. These could include, but are not limited to the following:

(A) Require or encourage/educate program participants to borrow from reputable lending institutions and/or join credit unions to establish credit prior to purchase

(B) Prohibit vehicle loans by selling dealership

(C) Leverage financial counseling offered by most credit unions by directing participants to those resources

(D) Suggest/require program participants be pre-approved before visiting dealership

(E) Administer program in collaboration with consumer advocacy groups that provide financial counseling

(F) Direct program participants to California's low-cost auto insurance program

(G) Require an estimate for total cost of car ownership with the truth-in-lending statement (now required by law)

(H) Establish pre-approved pricing for used vehicles

(I) Require vehicle inspection and disclosure by an independent auto mechanic

(J) Require vehicle history be provided and attached to paperwork

(K) Require vehicle warranty for specified timeframe

(6) Regular review of contractors and partners to ensure that the requirements of the plan and of these regulations are being met.

(7) Provisions to require contractor and partners to provide information to be used in the quarterly reporting to ARB as required by Section 2622.

(8) Dismantle of retired vehicles by a BAR contracted dismantler. This may require an air district to develop and enter into a separate contract or agreement with the dismantler.

~~(c) The district administering the voucher program shall submit applications pursuant to subdivision (a) of section 2624 for EFMP retirement to the Bureau for approval. The Bureau shall provide the District with its determination of an applicant's income eligibility~~

for the purpose of a voucher. If approved, the Bureau shall issue a Letter of Eligibility (LOE), which the district will give to the applicant.

~~(g)(d) The district administering the voucher pilot Retire and Replace program shall contract with participating vehicle dealers, or financial institutions, public transit agencies, and other entities as necessary for redemption of the vouchers Retire and Replace incentives.~~

~~(1) All vehicle dealers under contract to redeem vouchers must be licensed as dealers; private party vehicle transactions are not eligible for voucher redemption.~~

~~(1)(2) The voucher Retire and Replace incentive may not be redeemed for the purchase of a dismantled or salvaged vehicle. (3) The voucher may not be redeemed for the purchase of or a vehicle with a salvaged title (as described in Vehicle Code section 544).~~

~~(4) (2) The voucher Retire and Replace incentive may only be redeemed for replacement vehicles that meet or exceed one of the following minimum criteria:~~

~~(A) A replacement vehicle 8 years old or newer with an EPA combined fuel economy ratings<sup>17</sup>:~~

Model Year	Minimum U.S. EPA Combined Fuel Economy Rating	Minivans Minimum U.S. EPA Combined Fuel Economy Rating
<del>2002-2006 - 2009</del>	20	<u>19</u>
2010	22	<u>19</u>
2011	25	<u>21</u>
2012	28	<u>21</u>
2013	29	<u>21</u>
2014	30	<u>21</u>
2015	31	<u>21</u>

~~(B) A replacement vehicle that meets or exceeds 35 miles per gallon combined fuel economy rating~~

~~The EPA combined fuel economy rating used to determine voucher eligibility shall be the rating calculated by the EPA using the methodology for model year 2008 and later vehicles. The EPA combined fuel economy rating may be found on the "EPA Fuel Economy Estimates" window sticker of any new vehicle, and the ratings for all vehicles are currently available at <http://www.fueleconomy.gov>~~

<sup>17</sup> The EPA combined fuel economy rating used to determine Retire and Replace eligibility shall be the rating calculated by the EPA using the methodology for the model year 2008 and later vehicles. The EPA combined fuel economy rating may be found on the "EPA Fuel Economy Estimates" window sticker of any new vehicle, and the ratings for all vehicles are currently available at <http://fueleconomy.gov>

(C) A plug-in hybrid replacement vehicle

(D) A zero-emission replacement vehicle

(e)(h) A vehicle owner or joint vehicle owner may not receive more than one ~~voucher~~ Retire and Replace incentive under the EFMP.

(f)(i) Vehicles shall not be eligible for a ~~voucher~~ Retire and Replace incentive unless they meet the requirements of section 2624(b)(c) at an address in the district where the ~~voucher~~ Retire and Replace incentive is issued.

(j) In order to participate in the EFMP pilot Retire and Replace incentive program, an individual must have a household income less than or equal to 400% of FPL.

(k) Vehicles shall not be eligible for a Retire and Replace incentive unless they pass a functionality test.

(l) An applicant determined to be eligible under the EFMP pilot Retire and Replace incentive program may receive the following minimum incentives depending on income eligibility:

**Retire and Replace Program Incentives**

<u>Income Eligibility</u>	<u>8 year old or newer</u>	<u>35+ MPG</u>	<u>Plug-In Hybrid</u>	<u>Zero-Emission Vehicle</u>	<u>Alternative Transportation Mobility Options</u>
<u>Low Income &lt;225% Federal Poverty Level</u>	<u>\$4,000</u>	<u>\$4,500</u>	<u>\$4,500</u>	<u>\$4,500</u>	<u>\$4,500 Face Value</u>
<u>Moderate Income &lt;300% Federal Poverty Level</u>	<u>Not Available</u>	<u>\$3,500</u>	<u>\$3,500</u>	<u>\$3,500</u>	<u>\$3,500 Face Value</u>
<u>Above Moderate Income &lt;400% Federal Poverty Level</u>	<u>Not Available</u>	<u>Not Available</u>	<u>\$2,500</u>	<u>\$2,500</u>	<u>\$2,500 Face Value</u>

(1) For eligible participants with household income less than or equal to 225% of FPL, payment of \$4,000.00 toward the purchase of a replacement vehicle 8 years old or newer.

(2) For eligible participants with household income less than or equal to 225% of FPL, payment of \$4,500.00 toward the purchase of a replacement vehicle with a minimum 35 mpg fuel economy.

(3) For eligible participants with household income less than or equal to 225% of FPL, payment of \$4,500.00 toward the purchase of a hybrid, plug-in hybrid, or zero-emission replacement vehicle.

(4) For eligible participants with household income less than or equal to 225% of FPL, payment of \$4,500.00 toward the purchase of alternative transportation mobility options.

(5) For eligible participants with household income greater than 225% of FPL and less than or equal to 300% of the FPL, payment of \$3,500.00 toward the purchase of a replacement vehicle with a minimum 35 mpg fuel economy.

(6) For eligible participants with household income greater than 225% of FPL and less than or equal to 300% of the FPL, payment of \$3,500.00 toward the purchase of a hybrid, plug-in hybrid, or zero-emission replacement vehicle.

(7) For eligible participants with household income greater than 225% of FPL and less than or equal to 300% of the FPL, payment of \$3,500.00 toward the purchase of alternative transportation mobility options.

(8) For eligible participants with household income less than or equal to 400% of the federal poverty level, payment of \$2,500.00 toward the purchase of a hybrid, plug-in hybrid, or zero-emission replacement vehicle.

(9) For eligible participants with household income less than or equal to 400% of the federal poverty level, payment of \$2,500.00 toward the purchase of alternative transportation mobility options.

NOTE: Authority cited: Sections 39600, 39601 and 44125, Health and Safety Code. Reference: Sections 39600, 39601 and 44125, Health and Safety Code.

### **§ 2628. Parts Recycling and Resale.**

Dismantlers and any other contractor accepting vehicles for retirement under EFMP, and their agents, contractors and employees shall not remove any parts from an EFMP purchased vehicle for resale or reuse unless specifically exempted byper BAR through contract.

(a) No compensation with public funds from the EFMP shall be granted for any vehicle from which emission-related or drive train parts, as defined in section 2621, have been sold.

(b) All activities associated with retiring vehicles, including but not limited to the disposal of vehicle fluids and vehicle components, shall comply with:

(1) Local water conservation regulations;

(2) State, county, and city energy and hazardous materials response regulations;  
and



(3) Local water agency soil, surface, and ground water contamination regulations.

NOTE: Authority cited: Sections 39600, 39601 and 44125, Health and Safety Code. Reference: Sections 39600, 39601 and 44125, Health and Safety Code.

**§ 2629. Records and Auditing.**

(a) Records shall be securely maintained by the ~~dismantler-dismantlers~~ and all contractors accepting vehicles for retirement under EFMP for each vehicle purchase and transaction in the EFMP. The records shall be kept for a minimum of three years following the date of vehicle retirement.

(b) Records shall be maintained by the district for each ~~voucher redemption~~ Retire and Replace transaction in the EFMP. The records shall be kept for a minimum of three years following the date of replacement vehicle purchase.

NOTE: Authority cited: 39600, 39601, and 44125, Health and Safety Code. Reference: 39600, 39601, and 44125, Health and Safety Code.

**§ 2630. Severability.**

Each part of this article shall be deemed severable, and in the event that any provision of this article is held to be invalid, the remainder of this article shall continue in full force and effect.

NOTE: Authority cited: Sections 39600, 39601 and 44125, Health and Safety Code. Reference: Sections 39600, 39601 and 44125, Health and Safety Code.

**APPENDIX B**  
**HEALTH AND SAFETY CODE SECTION 44125-44126**

## **APPENDIX B: HEALTH AND SAFETY CODE SECTION 44125-44126**

### **44125. Voluntary retirement of high-polluting vehicles; Guidelines**

(a) No later than July 1, 2009, the state board, in consultation with the bureau, shall adopt a program to commence on January 1, 2010, that allows for the voluntary retirement of passenger vehicles and light-duty and medium-duty trucks that are high polluters. The program shall be administered by the bureau pursuant to guidelines adopted by the state board.

(b) No later than June 30, 2015, the state board, in consultation with the bureau, shall update the program established pursuant to subdivision (a). The program shall continue to be administered by the bureau pursuant to guidelines updated and adopted by the state board.

(c) The guidelines shall ensure all of the following:

(1) Vehicles retired pursuant to the program are permanently removed from operation and retired at a dismantler under contract with the bureau.

(2) Districts retain their authority to administer vehicle retirement programs otherwise authorized under law.

(3) The program is available for high polluting passenger vehicles and light-duty and medium-duty trucks that have been continuously registered in California for two years prior to acceptance into the program or otherwise proven to have been driven primarily in California for the last two years and have not been registered in another state or country in the last two years. The guidelines may require a vehicle to take, complete, or pass a smog check inspection.

(4) The program is focused where the greatest air quality impact can be identified.

(5) (A) Compensation for retired vehicles shall be at least one thousand five hundred dollars (\$1,500) for a low-income motor vehicle owner, as defined in Section 44062.1, and no more than one thousand dollars (\$1,000) for all other motor vehicle owners.

(B) Replacement may be an option for all motor vehicle owners and may be in addition to compensation for vehicles retired pursuant to subparagraph (A). For low-income motor vehicle owners, as defined in Section 44062.1, compensation shall be no less than two thousand five hundred dollars (\$2,500). Compensation for all other motor vehicle owners may not exceed compensation for low-income motor vehicle owners.

(C) Compensation for either retired or replacement vehicles for low-income motor vehicle owners may be increased as necessary to maximize the air quality benefits of the program while also ensuring participation by low-income motor vehicle owners, as defined in Section 44062.1. Increases in compensation amounts may be based on factors, including, but not limited to, the age of the retired or replaced vehicle, the emissions benefits of the retired or replaced vehicle, the emissions impact of any replacement vehicle, participation by low-income motor vehicle owners, as defined in Section 44062.1, and the location of the vehicle in an area of the state with the poorest air quality.

(6) Cost-effectiveness and impacts on disadvantaged and low-income populations are considered. Program eligibility may be limited on the basis of income to ensure the program adequately serves persons of low or moderate income.

(7) Provisions that coordinate the vehicle retirement and replacement components of the program with the vehicle retirement component of the bureau's Consumer Assistance Program, established pursuant to other provisions of this chapter, to ensure vehicle owners participate in the appropriate program to maximize emissions reductions.

(8) Streamlined administration to simplify participation while protecting the accountability of moneys spent.

(9) Specific steps to ensure the vehicle replacement component of the program is available in areas designated as federal extreme nonattainment.

(10) A requirement that vehicles eligible for retirement have sufficient remaining life. Demonstration of sufficient remaining life may include proof of current registration, passing a recent smog check inspection, or passing another test similar to a smog check inspection.

(d) When updating the guidelines to the program established pursuant to subdivision (a), the state board shall study and consider all the following elements:

(1) Methods of financial assistance other than vouchers.

(2) An option for automobile dealerships or other used car sellers to accept cars for retirement, provided the cars are dismantled consistent with the requirements of the program.

(3) An incentive structure with varied incentive amounts to maximize program participation and cost-effective emissions reductions.

(4) Increased emphasis on the replacement of high polluters with cleaner vehicles or the increased use of public transit that results in the increased utilization of the vehicle replacement component of the program.

(5) Increased emphasis on the reduction of greenhouse gas emissions through increased vehicle efficiency or transit use as a result of the program.

(6) Increased partnerships and outreach with community-based organizations.

#### **44126. Enhanced Fleet Modernization Subaccount**

The Enhanced Fleet Modernization Subaccount is hereby created in the High Polluter Repair or Removal Account. All moneys deposited in the subaccount shall be available to the department and the BAR, upon appropriation by the Legislature, to establish and implement the program created pursuant to this article.

**APPENDIX C**  
**INCOME ELIGIBILITY AND VEHICLE AFFORDABILITY**

## APPENDIX C: INCOME ELIGIBILITY AND VEHICLE AFFORDABILITY

Staff reviewed existing economic data to estimate what resources participants would require to purchase a replacement vehicle to gauge how well the incentives offered correspond with the financial needs of potential participants.

Table C-1 shows how the proposed income eligibility thresholds based on the Federal Poverty guidelines currently translate to annual gross income. It should be noted that the Federal poverty guidelines are updated annually and vary by household size.

**Table C-1**  
**INCOME ELIGIBILITY TABLE**  
**Based on the 2014 Federal Poverty Level<sup>1</sup> (FPL)**

Persons in Household	100%	225%	300%	400%
1	\$ 11,670	\$ 26,258	\$ 35,010	\$ 46,680
2	\$ 15,730	\$ 35,393	\$ 47,190	\$ 62,920
3	\$ 19,790	\$ 44,528	\$ 59,370	\$ 79,160
4	\$ 23,850	\$ 53,663	\$ 71,550	\$ 95,400
5	\$ 27,910 <sup>2</sup>	\$ 62,798	\$ 83,730	\$ 111,640

1. U. S. Department of Health and Human Services, 2014 Poverty Guidelines for the 48 Contiguous States and the District of Columbia, <http://aspe.hhs.gov/poverty/14poverty.cfm>.
2. For families/households with more than 5 persons, add \$4,060 for each additional person.

Income eligibility thresholds defined at 225 percent, 300 percent, 400 percent provide various replacement options for qualified participants. Section 3394.4 of title 16 of Division 33, Article 11 of the California Code of Regulations defines the income eligibility for CAP at 225 percent FPL while the 300 percent FPL and 400 percent FPL align well relative to income eligibility requirements of other California benefit programs. The California Homebuyer's Down Payment Assistance program has an income eligibility requirement of around 325 percent FPL while Covered California is 400 percent FPL. The income eligibility requirements for basic assistance programs addressing childhood nutrition like CalFresh or California National School Breakfast and Lunch Program are around 180 percent FPL or less.

According to the Bureau of Labor Statistics, the average household expenditure on transportation is approximately 15 percent of gross annual income. This is a fairly constant figure across all income groups, but some individual households spend more, and some spend less. The U.S. Census Bureau states the national average budget is 12 percent. The following tables estimate how expenses for a newer, cleaner car might fit into the transportation budget of a household size of four people at the EFMP income eligibility thresholds. Table C-2 calculates the potential available household transportation budget as 15 percent of the annual gross monthly income while Table C-3 shows the estimated operating expenses associated with vehicle ownership. It should be noted that the operational costs of the proposed EFMP

replacement vehicles are less than those of the base vehicle. Although insurance and registration costs are higher, the savings in fuel cost and repair bills are more significant.

The transportation budget for smaller income households, like a household earning 100 percent FPL has an estimated transportation budget less than the average monthly operating expense for a model year 1995 vehicle, would not cover the estimated operating expenses for gas, insurance, maintenance, etc; these households either do not own a vehicle or have to balance transportation costs with other household necessities. Larger households have a higher income eligibility limit and staff analysis shows, that on average, those households may have enough resources to carry a vehicle loan.

**Table C-2  
CALCULATED AVERAGE AVAILABLE MONTHLY TRANSPORTATION BUDGET  
FOR A HOUSEHOLD OF FOUR PEOPLE**

Income Eligibility	100%	225%	300%	400%
Annual Gross Income	\$ 23,850	\$ 53,663	\$ 71,500	\$ 95,400
Monthly Gross Income	\$ 1,988	\$ 4,472	\$ 5,963	\$ 7,950
15% Monthly Transportation Budget	\$ 298	\$ 671	\$ 894	\$ 1,193

**Table C-3  
AVERAGE MONTHLY VEHICLE OPERATING EXPENSES**

Replacement Options	MY1995	Replace with 8 Yrs	Replace with 35+ MPG	Replace with Plug-In Hybrid	Replace with ZEV
Fuel Cost <sup>1</sup>	\$ 179	\$ 142	\$ 81	\$ 36	\$ 28
Insurance <sup>2,3</sup>	\$ 65	\$ 97	\$ 103	\$ 107	\$ 118
Registration/License <sup>2,4</sup>	\$ 7	\$ 10	\$ 13	\$ 17	\$ 20
Maintenance/ Repair <sup>2,5</sup>	\$ 93	\$ 73	\$ 65	\$ 68	\$ 38
Average Monthly Vehicle Operating Costs	\$ 343	\$ 322	\$ 262	\$ 228	\$ 203

1. Assumes 10,000 miles annually at \$3.86/gal
2. Varies based on the value or age of the vehicle
3. Insurance rates taken from edmunds.com "True Cost to Own" calculator and adjusted for 10,000mi/yr
4. California Department of Motor Vehicles, Registration Fee Calculator (annual registration and licensing fees)
5. Edmunds.com "True Cost to Own" calculator (adjusted for 10,000mi/yr)

Using the difference in operating costs provided in table C-3 and assuming the MY 1995 as the current vehicle, table C-4 estimates the potential cost savings of replacing an older vehicle with a more fuel efficient vehicle.

**Table C-4.**  
**ESTIMATED MONTHLY OPERATING COST SAVINGS**

Replace with 8 Yrs	Replace with 35+ MPG	Replace with Plug-In Hybrid	Replace with ZEV
\$21	\$81	\$115	\$140

Staff also examined a sampling of cars currently available for sale, grouped by possible replacement option. There is much variability in retail price by model year, make and models, and odometer readings as shown in Table C-5.

**Table C-5**  
**CURRENT CARS AVAILABLE FOR SALE BY REPLACEMENT OPTION**

Replacement Option	Model Year	Make/Model	Odometer	Retail Price
< 8 Yrs old, current MPG requirements	2006	Pontiac/G6	111,113	\$ 5,999
	2009	Toyota/Camry SE	128,244	\$ 9,231
	2006	Ford/Escape Hybrid	85,540	\$ 9,995
	2008	Honda/Civic EX	60,785	\$ 11,500
	2008	Saturn/ Vue 2WD	94,062	\$ 11,980
	2010	Hyundai/Sonata GLS	42,720	\$ 11,995
	2006	Toyota/Prius	64,157	\$ 12,900
	2013	Ford/ Fiesta S	16,139	\$ 12,983
	2013	Hyundai/Elantra GLS	38,410	\$ 12,985
	2012	Nissan/Altima	50,991	\$ 13,500
	2010	Honda/Accord	43,479	\$ 13,995
	2008	Toyota/Camry Hybrid	62,447	\$ 13,995
	2008	Mercedes-Benz/E320 Bluetec	118,541	\$ 13,999
	2012	Chevrolet/Malibu	41,704	\$ 14,890
Minivan MPG > 19	2006	Dodge/Grand Caravan	112,712	\$ 4,999
	2006	Ford/Freestar	140,714	\$ 6,403
	2008	Chevrolet/Uplander	97,832	\$ 6,995
	2007	Toyota/Sienna	97,613	\$ 10,850
	2007	Honda/Odyssey	119,736	\$ 10,888
	2009	Dodge/Grand Caravan	80,303	\$ 11,444
	2008	Nissan/Quest S	87,513	\$ 11,888
	2012	Nissan/Quest S	55,489	\$ 15,999
	2012	Toyota/Sienna LE	47,050	\$ 21,995
	2013	Chrysler/Town & Country	34,655	\$ 21,995



**Table C-5 (continued)**  
**CURRENT CARS AVAILABLE FOR SALE BY REPLACEMENT OPTION**

<b>Replacement Option</b>	<b>Model Year</b>	<b>Make/Model</b>	<b>Odometer</b>	<b>Retail Price</b>
Minivan MPG > 19	2013	Mazda/5	14,256	\$ 21,999
	2011	Honda/Odyssey LX	33,411	\$ 22,350
	2014	Kia/Sedona Lx	11,945	\$ 22,495
	2013	Toyota/Sienna	22,423	\$ 22,942
	2013	Chrysler/Town & Country	12,165	\$ 23,991
	2014	Honda/Odyssey	3,973	\$ 33,998
35+ MPG	2010	Honda/Insight EX	99,991	\$ 9,957
	2012	Chevrolet/Cruze ECO	121,468	\$ 10,924
	2011	Honda/Insight	25,930	\$ 13,995
	2013	Toyota/Prius C	8,000	\$ 13,995
	2010	Volkswagen/Jetta TDI	83,511	\$ 14,321
	2013	Ford/Fiesta/SE	4,329	\$ 14,388
	2010	Volkswagen/Jetta TDI	102,352	\$ 14,990
	2012	Toyota/Prius	28,000	\$ 14,995
	2011	Honda/Insight	34,374	\$ 14,996
	2010	Toyota/Prius II	35,706	\$ 14,998
Plug-In Hybrids & ZEV	2012	Mitsubishi/iMiEV ES	113	\$ 15,400
	2012	Nissan/Leaf SL	2,174	\$ 15,900
	2011	Nissan/Leaf SV	25,569	\$ 15,986
	2012	Nissan/Leaf SV	4,307	\$ 16,150
	2012	Mitsubishi/iMiEV ES	7,107	\$ 17,516
	2012	Mitsubishi/iMiEV SE	7,274	\$ 17,650
	2013	Toyota/Prius C	7,612	\$ 17,827
	2011	Honda/Civic Hybrid	7,765	\$ 17,900
	2012	Nissan/Leaf SL	12,873	\$ 18,000
	2013	Nissan/Leaf S	2,502	\$ 18,488
	2012	Mazda/3	16,207	\$ 18,998
	2014	Toyota/Corolla LE ECO	18,536	\$ 19,907
	2013	Volkswagen/Jetta TDI	25,198	\$ 19,995
	2012	Nissan/Leaf SV	25,200	\$ 20,985
	2013	Smart/fortwo	2,427	\$ 21,995
	2013	Ford/Focus-Electirc	1,490	\$ 22,988
	2013	Ford/C-Max SEL	30,271	\$ 23,988
	2013	Ford/Fusion SE— Plug-In Hybrid	15,291	\$ 23,991
	2013	Nissan/Leaf SV	4,696	\$ 24,542
	2012	Toyota/Prius--Plug-In Hybrid	29,577	\$ 25,399
2013	Toyota/Prius--Plug-In Hybrid	20,829	\$ 26,995	
2012	Chevrolet/Volt	17,890	\$ 26,999	

Replacement Option	Model Year	Make/Model	Odometer	Retail Price
Plug-In Hybrids & ZEV	2013	Chevrolet/Volt	5,617	\$ 27,995
	2014	Chevrolet/Volt	6,758	\$ 35,055
	2013	Ford/Fusion SE--Plug-In Hybrid	4,378	\$ 35,651
	2013	Toyota/RAV4--Electric	1,967	\$ 35,995
	2012	Fisker/Karma EcoSport	10,755	\$ 53,990
	2012	Fisker/Karma EcoSport	8,755	\$ 59,990

Autotrader.com as of MAR2014: Dealer-only within 150 miles of 91731

The main determining factor in vehicle affordability is securing low-cost financing. Interest rates are generally lower for new car purchases than for used cars, but both are highly dependent on an individual's specific credit history. For example a typical subprime credit score of 550 to 619 could have a 6 percent interest rate for a new car while the used car interest rate could be around 9 percent. If the credit score was lower than 550, the interest rates could be 12 percent and 18 percent respectively.

To determine an appropriate interest rate to use in this analysis, staff relied upon information gathered by a group that provides assistance to low-income participants to purchase newer, more reliable vehicles, Ways to Work. Ways To Work is a federally certified Community Development Financial Institution (CDFI) which offers access to low-cost loans for families with low-to-moderate household income and challenging credit histories, which matches the target audience for EFMP. According to the 2011 Ways To Work Program Study<sup>18</sup> prepared by ICF International, Ways to Work program participants have an average credit score of 571, which indicates that an interest rate of 9 percent would be appropriate.

For the 8 year-old and 35+ MPG replacements, table C-6 estimates the potential monthly payment amount after factoring in the incentive amounts provided by EFMP used as the sole down-payment for a loan with an interest rate of 9 percent and a 60-month repayment term.

<sup>18</sup> <http://www.waystowork.org/docs/evaluations/2011EvalReport.pdf>

**Table C-6.**  
**Estimated Monthly Payment for Conventional Replacement Vehicles**

Income Eligibility	Replace with 8 year-old vehicle	Replace with 35+ MPG
Low Income <225% Federal Poverty Level	Purchase price \$12,000 EFMP incentive \$ 4,000 Monthly Payment \$ 166	Purchase price \$16,000 EFMP incentive \$ 4,500 Monthly Payment \$ 239
Moderate Income <300% Federal Poverty Level	--	Purchase price \$16,000 Down Payment \$ 3,500 Monthly Payment \$ 259

For the advanced technology replacement vehicles, table C-7 estimates the potential monthly payment amount after the EFMP incentive and an additional \$5,500 in public funding (such as from Low-Carbon Transportation Funding) is applied as a down payment, with a loan with an interest rate of 9% and a 60-month repayment term for the balance of the purchase price.

**Table C-7**  
**Estimated Monthly Payment for Advanced Technology Replacement Vehicles**

Income Eligibility	Replace with Plug-In Hybrid <sup>3</sup>	Replace with ZEV <sup>4</sup>
Low Income <225% Federal Poverty Level	Purchase price \$25,000 EFMP incentive \$ 4,500 Other funds \$ 5,500 Monthly Payment \$ 311	Purchase price \$30,000 EFMP incentive \$ 4,500 Other funds \$ 5,500 Monthly Payment \$ 415
Moderate Income <300% Federal Poverty Level	Purchase price \$25,000 EFMP incentive \$ 3,500 Other funds \$ 5,500 Monthly Payment \$ 332	Purchase price \$30,000 EFMP incentive \$ 3,500 Other funds \$ 5,500 Monthly Payment \$ 436
Above Moderate Income <400% Federal Poverty Level	Purchase price \$25,000 EFMP incentive \$ 2,500 Other funds \$ 5,500 Monthly Payment \$ 353	Purchase price \$30,000 EFMP incentive \$ 2,500 Other funds \$ 5,500 Monthly Payment \$ 457

A comparison of vehicle affordability based on vehicle replacement option can be determined by subtracting the cost savings summarized in table C-4 from the estimated monthly payments in tables C-6 and C-7 above. Staff's conclusion is that the incentives proposed are consistent with the financial capabilities of the target population and the anticipated replacement vehicles available for sale. However, widespread deployment of advanced technology replacements will be dependent on additional sources of funding.

**APPENDIX D**  
**ESTIMATED EMISSIONS BENEFITS**

## APPENDIX D – ESTIMATED EMISSIONS BENEFITS

The proposed change to focus all retirement toward low-income consumers, who are eligible for a higher incentive amount, will decrease the number of vehicles retired by approximately 3,000 vehicles each year. Under current funding, staff expects total retirements of 18,000 vehicles each year. This decrease in emissions benefits will be offset to a certain extent by the proposed requirement to require a recent Smog Check to ensure greater remaining useful life of those in the program. It is anticipated that the retirement and replacement element will provide incentives for approximately 700 participants divided equally in the South Coast and San Joaquin Valley air basins.

Emission benefits were estimated by taking the emissions difference between the retired vehicle and the replacement vehicle as calculated using EMFAC (the state's mobile source emission inventory model). The EMFAC model output of the total daily emissions for the model year(s) of interest was divided by the total number of vehicles of that model year in order to arrive at the estimated daily emissions for a vehicle of that model year. The difference in estimated daily emissions between the vehicles of each model year is then multiplied by the expected life of the benefit; i.e. the expected remaining life of the retired vehicle. This difference is the estimated benefit per vehicle participating in the program.

Emissions for the retired vehicle are based on the average of 1988-1993 model years, as these vehicles are common in the existing program. The retirement element assumes that the replacement vehicle will be fleet average.

For the pilot replacement, emissions for the high efficiency (35 mile per gallon) vehicle are based on the average of the newest 4 model years. Emission rates for 8 years and newer are based on an average of the emissions from 5-,6-,7-, and 8-year old vehicles. The table below provides a summary of the emissions per vehicle.

<b>Calendar Year 2014 "Light-Medium Duty Fleet"<sup>1</sup> Statewide Annual ROG and NOx Emissions Per Vehicle<sup>2</sup></b>				
	ROG (lbs)	NOx (lbs)	ROG (grams/mile)	NOx (grams/mile)
Model Years 1988-1993	0.11	0.09	2.02	1.59
All Model Years	0.02	0.03	0.29	0.34
4 Years Old and Newer	0.0030	0.0064	0.03	0.06
5 to 8 Years Old	0.0048	0.0090	0.06	0.11

<sup>1</sup> Passenger Cars and Trucks up to 10,000 pounds GVWR.

<sup>2</sup> EMFAC2011LDV.

Note that the total number of tons shown is calculated by multiplying the total per vehicle benefit by 18,000 retired vehicles. The tons per day estimate is the total benefit in tons divided by 365 days per year and then divided by three (benefit is assumed to be over a three year period as discussed earlier).

<b>CY 2014 ROG and NOx Emissions Benefits (tons per day) of Replacing 18,000 "1988-1993" Vehicles with 18,000 "Fleet Average" Vehicles<sup>1</sup></b>			
	ROG (tpd)	NOx (tpd)	ROG+NOx (tpd)
Model Years 1988-1993	1.00	0.79	1.79
All Model Years	0.21	0.25	0.46
Benefit	0.79	0.54	1.33

<sup>1</sup> Passenger Cars and Trucks up to 10,000 pounds GVWR.

**APPENDIX E**  
**CALCULATION OF COST EFFECTIVENESS OF EFMP**

## APPENDIX E – CALCULATION OF COST EFFECTIVENESS OF EFMP

The cost effectiveness of the EFMP will vary based on the types of vehicles retired, the number of vouchers granted, and the actual funds appropriated. An estimate for the each element and the total program is shown below.

**Estimated Cost Effectiveness**

Consumer Replacement Option	Retirement-only	Pilot Retire and Replace	Dollar per ton (NO <sub>x</sub> + HC)
Low-Income	\$1,500	N/A	\$19,000
Low-Income < 8 yr old	\$0	\$4,000	\$39,000
Low-Income 35 MPG	\$0	\$4,500	\$43,000
Moderate-Income 35 MPG	\$0	\$3,500	\$34,000
Moderate-Income ZEV	\$0	\$3,500 + \$2,500* = \$6,000	\$40,000
Overall Program			\$20,000

\*This incentive amount represents the estimated contribution from LCT-GGRF Plus-up pilot. Actual incentive amount would be discussed by the LCT workgroup.

### Notes:

- 1) Assumes the following:
  - a) Total funding of \$27 million for retirement and \$2.8 million for Retire and Replace.
  - b) 25 percent of pilot funds used for low-income with 8 year old replacement.
  - c) 50 percent of pilot funds used for pilot replace with HEV or ZEV
  - d) 20 percent of pilot funds used for vehicles with better than 35 miles per gallon
  - e) Emissions benefits from EMFAC as described in appendix of estimated emission benefits.
  - f) Retired vehicle is 1988-1993 model year.
  - g) Emissions for 8-year and newer replacement based average of 5,6,7,8 year old vehicles
  - h) Emissions for high efficiency vehicle based on average of 1,2,3,4 year old vehicles
  - i) Overall cost-effectiveness weighted: 18,000 vehicles at \$19,000 per ton/ 700 vehicles at \$40,000 per ton
- 2) Consistent with other incentive programs, administration costs are not included in cost effectiveness calculations.