



Air Resources Board



Linda S. Adams
Acting Secretary for
Environmental Protection

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Edmund G. Brown, Jr.
Governor

April 7, 2011

Mail-Out #MSC 11-08

TO: Automobile and Engine Manufacturers

SUBJECT: REQUEST FOR ALTERNATIVE FUEL VEHICLE PRODUCTION PLANS

The Air Resources Board (ARB) is requiring your assistance in providing information regarding your alternative fuel vehicle (AFV) production plans. This information is necessary in order to implement the requirements of ARB's Clean Fuels regulations ensuring sufficient fueling infrastructure is available to support vehicle commercialization. This reporting is required under California emission standards and test procedures.¹ ARB staff is concurrently proposing revisions to the Clean Fuels Program (Title 13, Chapter 8), per Resolution 09-66,² to determine how the regulation should be updated to complement near-term zero emission vehicle development and commercialization and reflect current and future commercial conditions. As such, your information will likely factor into this regulatory process.

The current regulations require that certain owner/lessors of retail gasoline stations in California equip an appropriate number of stations to dispense a clean fuel if the number of fleet-operated and publically owned or leased low-emission vehicles (LEV) certified on that clean fuel is expected to meet a specified level. If an AFV category triggers the program, we are required to notify affected parties of the number of clean fuel outlets required. In order to provide this estimate, we need projections of the number of vehicles certified on each clean fuel intended for sale or lease in California.

We are requesting that manufacturers of AFVs provide projected California sales figures for the 2011, 2012, 2013 and, if available, 2014 model years. For projected numbers, please provide a single best estimate, not a range. In addition, for manufacturers who had certified AFVs for the 2009-2010 model years, we request an update using actual sales and leases.

¹ Automobile and engine manufacturers are required to submit the requested information pursuant to part I, section H.3.2 of the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Vehicles," amended March 2010. The information will be used to calculate the volume of clean fuels and the number of fueling stations required in 2013, if the trigger is met.

² At the December 2009 Air Resources Board hearing on the redesign of the Zero Emission Vehicle (ZEV) mandate, the Board directed staff to "mandate hydrogen through existing regulations or through a new regulation" as part of a suite of complementary policies to support ZEV infrastructure. The Clean Fuels Program regulation is currently under revision to achieve this objective.

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

California Environmental Protection Agency

The vehicle projections and sales production data should specify the manufacturer, year, model, engine family (test group), fuel type, fuel economy, certification level, and vehicle type (passenger cars, light duty trucks, and medium duty vehicles). All AFVs that are certified to LEV II standards (LEV, Ultra-Low Emission Vehicle and Super Ultra-Low Emission Vehicle) and Zero Emission Vehicle standards should be reported.

Additionally, to satisfy the ARB board directive, please report the following:

1. Vehicle projections and sales production data for certified dedicated fuel or hybrid vehicles or conversions that use hydrogen or off-vehicle electric charging (this does not apply to vehicles that produce electricity or hydrogen solely from onboard means), and
2. Projected timing and location of AFV placements (i.e., statewide, Bay Area, Los Angeles).

A sample format for the information requested is enclosed. Please do not aggregate production numbers from previous years.

The requested information must be submitted no later than May 31, 2011, to the following address:

Mr. Gerhard Achtelik, Manager
Zero Emission Vehicle Infrastructure Section
Mobile Source Control Division
California Air Resources Board
Post Office Box 2815
Sacramento, CA 95812-2815

Revisions to these plans are requested as they occur. The information provided in response to this request will be kept confidential, pursuant to Title 17, California Code of Regulations, Section 91011, to ensure that the competitive position of each manufacturer is not compromised.

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If you have any questions, please contact Gerhard Achtelik, Manager, at (916) 323-8973, or by email at gachteli@arb.ca.gov, or Leslie Goodbody, Air Resources Engineer, at (916) 323-2961, or by email at lgoodbod@arb.ca.gov. Contact Leslie Goodbody if you wish to be removed from this mailing list.

Sincerely,



Robert H. Cross, Chief
Mobile Source Control Division

Attachment

cc: Gerhard Achtelik Jr., Manager
Zero Emission Vehicle Infrastructure Section

Leslie Goodbody
Air Resources Engineer
Zero Emission Vehicle Infrastructure Section

Enclosure
SAMPLE REPORT FORMAT

Company	Model Year	Model/vehicle type	Fuel Type/ Vehicle Class	Engine Family (Test Group)	Worst-case ¹ Cert. Level	<u>Dual or Flex Fuel Only</u> NMOG Certification Standard (g/mi)		Fuel Economy alt City/Highway		CA Sales/Leases	Production
						Alt Fuel	Gasoline	Gasoline	Alt Fuel		
ARB	2009	Air Bird/PC	Ele/BEV		ZEV			NA	90/80 ²	100	Actual
ARB	2010	Air Bug/PC	CNG/ICE		PZEV			NA	32/40	1560	Actual
ARB	2010	Air Bug/PC	E85/FFV		ULEV			28/34	22/27	1150	Actual

Company	Model Year	Model/vehicle type	Fuel Type/ Vehicle Class	Engine Family (Test Group)	Worst-case Cert. Level	<u>Dual or Flex Fuel Only</u> NMOG Certification Standard (g/mi)		Fuel Economy City/Highway		CA Sales/Leases	Production
						Alt Fuel	Gasoline	Gasoline	Alt Fuel		
ARB	2011	Air Bug 2/PC	CNG/HEV		PZEV			NA	45/40	500	Projected
ARB	2011	Air Bug Z/PC	Ele/BEV		ZEV			NA	100/90	1000	Projected
ARB	2011	Titus 1	GH2/HEV		ZEV			NA	60/75 ³	100	Projected

Company	Model Year	Model/vehicle type	Fuel Type/ Vehicle Class	Engine Family (Test Group)	Worst-case Cert. Level	<u>Dual or Flex Fuel Only</u> NMOG Certification Standard (g/mi)		Fuel Economy alt City/Highway		CA Sales/Leases	Production
						Alt Fuel	Gasoline	Gasoline	Alt Fuel		
ARB	2012	Air Bug 2/PC	CNG/HEV		PZEV			NA	TBD	500	Projected
ARB	2012	Air Plug-in/PC	Gas/PHEV		PZEV			TBD	TBD	100	Projected
ARB	2013	Air Plug-in/PC	Gas/PHEV		PZEV			TBD	TBD	1000	Projected
ARB	2013	Titus 2	GH2/HEV		ZEV			NA	TBD	1000	Projected
ARB	2014	Titus 3	GH2/HEV		ZEV			NA	TBD	2000	Projected

BEV: Battery electric vehicle
 CNG: Compressed natural gas
 E85: 85% ethanol/15% gasoline
 Ele: Electricity as a fuel
 GH2: Compressed hydrogen gas
 HEV: Hybrid electric vehicle
 ICE: Internal combustion engine
 LH2: Liquid hydrogen
 LNG: Liquid natural gas
 NMOG: Non methane organic gases
 PHEV: Plug-in hybrid electric vehicle

¹ For flex or dual fuel vehicles, choose certification level with highest emissions
² Expressed in miles per gallon of gasoline equivalent, where one gallon of gasoline = 33.7 kilowatt-hours
³ Expressed in miles per gallon of gasoline equivalent, where one gallon of gasoline = 1 kilogram of hydrogen