Jeff Groscost Speaker of the House Arizona House of Representatives 1700 West Washington Phoenix, AZ 85007

Dear Mr. Groscost:

This is in response to your October 1, 1999 letter to Robert Perciasepe, Assistant Administrator for Air and Radiation, requesting that the U.S. Environmental Protection Agency ("EPA") extend "option three" of the Addendum to Mobile Source Enforcement Memorandum 1A ("the Addendum"). Mr. Perciasepe has asked me to respond to your request because the Addendum is an enforcement policy that my office promulgated and is responsible for implementing. Since your letter to Mr. Perciasepe, you have met several times with staff from my office and followed up with a letter to me directly on December 22, 1999, in which you reiterated your request that we extend option three. This letter is also in response to your December 22, 1999 letter. As explained more fully below, EPA is granting a two model year extension of option three, contingent on the alternative fuel vehicle converter taking steps to certify under option one by model year 2002.

The Addendum is an enforcement policy that provides guidance to persons on how to avoid violating the Clean Air Act ("the Act") when selling or installing an aftermarket kit to convert a gasoline-powered vehicle to run on natural gas or propane. The Addendum sets forth three options to insure compliance with the Act, including one option (referred to as "option three") that allows the person selling or installing the kit to conduct before and after testing to demonstrate that the kit does not increase harmful emissions from the vehicle on which it is installed. As you are aware, option three of the Addendum will expire on June 30, 2000, and cannot be used to convert vehicles and engines beyond model year 1999. You have requested that we extend this expiration date because of concerns that, without option three, alternative fuel conversion kit manufacturers will not be able to sell conversion kits for model year 2000 and later years and that there will be an insufficient supply of alternative fuel vehicles to meet the growing demand in Arizona.

To fully understand our position on this issue, let me give you some background on our regulation of alternative fuel conversion kits. Any modification of a vehicle from the original configuration certified by EPA as emission-compliant constitutes tampering under the Act if that modification results in an increase in emissions from the vehicle. On June 24, 1974, EPA's

Office of Enforcement and General Counsel issued Mobile Source Enforcement Memorandum 1A ("Memo 1A") to provide guidance to the service and repair industry regarding how EPA intended to enforce the tampering prohibition of the Act with respect to the use of aftermarket parts, which would include kits used to convert gasoline vehicles to run on alternative fuels such as natural gas or propane.

Memo 1A provides, in part, that the use of an aftermarket part will not constitute tampering if the person has a "reasonable basis" to believe that use of the part will not adversely affect emissions performance. It also provides specific procedures or options by which a person would have a reasonable basis. One option is emissions testing performed in accordance with EPA's regulations demonstrating compliance with emission standards for the full useful life of the vehicle or engine. An alternate option is that "a Federal, state or local environmental control agency represents that a reasonable basis exists" based on testing done in accordance with procedures specified by that agency.

Up through the mid-1990's, most businesses that converted vehicles from gasoline-fueled to natural gas or propane have relied on the alternate option utilizing procedures established by California or Colorado for demonstrating emissions compliance. While EPA had some concerns about the stringency of those state procedures, we were willing to allow this to encourage the growth of the alternative fuel vehicle industry, which has a lot of potential for emissions benefits. Unfortunately, in late 1996, EPA became aware of federal emission test data generated under a program conducted by the U.S. Department of Energy's National Renewable Energy Laboratory ("NREL") which indicated most of the vehicles modified to run on alternative fuels significantly exceeded one or more applicable federal emission standard. The vehicles in the NREL program had been converted using kits certified by the state of California under their existing procedures for alternative fuel conversions. EPA subsequently reviewed emission test data from other sources which generally substantiated the NREL results.

In response to concerns raised by these data, EPA conducted a public stakeholders meeting on February 21, 1997, with representatives of the affected industries, interested fleet operators and the U.S. Department of Energy ("DOE"), who has primary responsibility for promoting the use of alternative fuels. The outcome of this meeting, and subsequent discussions with DOE and other affected parties, was a change in EPA policy embodied in the Addendum published on September 4, 1997.

The Addendum ended use of the previously available options under Memo 1A and created three new options intended to insure that a vehicle converted to run on natural gas or propane would actually be as clean as, if not cleaner than, the original gasoline vehicle. Option one under the Addendum is to certify the alternative fuel conversion kit plus the vehicle it will go on as a new vehicle under EPA's new vehicle certification rules. These certification rules have been in place for over twenty years, and we have a lot of confidence that an alternative fuel vehicle certified under EPA rules will meet all applicable emission standards. Option two is to certify the kit under California's new program for alternative fuel conversions. California's new

program is much more stringent than the program that was in place when the NREL testing was done, and like federal certification of new vehicles, should insure that vehicles with California certified kits installed on them will meet all applicable emission standards. Option three involves before and after testing of vehicles that are converted to demonstrate that there has been no degradation of emissions. It is less extensive than federal certification or certification under California's new program and consequently less expensive.

After discussions with affected parties, EPA agreed to include option three to allow kit manufacturers sufficient time to complete the process under options one and two and to allow the alternative fuel vehicle market to continue growing enough to recoup the expense associated with options one and two through the increased sale of kits and vehicles. However, because option three's less stringent testing requirements create a higher risk that converted vehicles will be dirtier than the gasoline vehicles they are replacing, the Addendum allowed use of option three only until December 31, 1998.

On June 1, 1998, in response to concerns that there were not enough alternative fuel vehicles to meet demand, EPA extended the expiration date for option three until June 30, 2000, but limited its use to vehicles through the 1999 model year.

You and several other parties have recently requested that we extend the expiration date for option three again beyond model year 1999. The main reasons given for this requested extension are concerns that small conversion kit manufacturers and installers will be put out of business because they cannot afford to comply with options one and two and that there will be an insufficient supply and variety of alternative fuel vehicles to meet demand.

On December 10, 1999, I understand that you and Wayne Gardner, a fellow member of the Arizona House of Representatives, met with Bruce Buckheit, the Director of the Air Enforcement Division within my office, and Greg Green, the Director of the Vehicle and Engine Compliance Division within EPA's Office of Transportation and Air Quality ("OTAQ"). At that meeting, you discussed Arizona's alternative fuel vehicle incentives program and the problem people in Arizona have had obtaining alternative fuel vehicles. A follow up conference call was also held on December 22, 1999. During that conference call, my staff discussed with you a possible two model year extension of option three, but only for kit manufacturers who are actively trying to certify under option one for model year 2002.

Since that time, we have had discussions with the two primary trade associations representing natural gas and propane vehicle manufacturers and converters, with whom we shared the idea of a possible extension. We have also heard from at least one kit manufacturer who was aware of the possible extension. All parties expressed concern and raised legitimate

issues regarding a possible two model year extension of option three based on the intent to certify under option one. The three main concerns raised were:

- 1. The difficulty of having to certify a converted vehicle to the current emission standards even though the original vehicle may have been built several years ago and was certified to earlier, less stringent standards;
- 2. The difficulty of having to follow certification requirements that are geared towards gasoline vehicles when certifying alternative fuel vehicles, particularly the evaporative emission requirements; and,
- 3. The cost and time commitments associated with new vehicle certification, which may not justify trying to certify certain low-demand models.

Since speaking with the trade associations, we have been working with OTAQ to try to address some of the above concerns before issuing a final decision to extend option three. As explained below, EPA has recently taken steps to reduce the certification burden on alternative fuel vehicle converters. In addition, some of the concerns expressed by the trade associations are already addressed by our regulations, but may not be fully understood by the alternative fuel vehicle industry.

On March 7, 2000, EPA finalized a rule (65 FR 11898) that greatly reduces the certification fees that alternative fuel vehicle converters will have to pay. In addition, already existing regulations (40 CFR § 85.504) allow alternative fuel vehicle converters to certify the converted vehicle to the emission standards that were in place at the time the original gasoline vehicle was made. Moreover, already existing regulations (40 CFR § 86.094-23(c)) allow alternative fuel vehicle converters to provide a compliance statement that their systems are fully sealed to satisfy the evaporative emission requirements, rather than having to follow the more difficult evaporative test procedures applicable to most gasoline-powered vehicles.

Having addressed most of the concerns raised by the alternative fuel trade associations and others, we are hereby extending option three through December 31, 2001, and including model year 2000 and 2001 vehicles and engines. This extension will only be available, however, for those conversion kit manufacturers who notify EPA in writing by June 30, 2000 that they agree to the following conditions with respect to the kits they will sell:

- 1. Full compliance with either options one, two, or three for model years 2000 and 2001 for each conversion kit sold;
- 2. Records will be kept for five years of all sales of kits under option three, including the engine family identification, the VIN of the converted vehicle, the date conversion was completed, and appropriate emissions data adjusted by the applicable deterioration factor;

- 3. When total sales of all alternative fuel conversion kits by the manufacturer have reached 200 units, a full certification plan will be presented to EPA for each engine family intended to be sold in model year 2002 and developmental testing in preparation for certification will begin; and,
- 4. If total sales of an alternative fuel conversion kit by a manufacturer reaches 600 for a particular engine family in model year 2000 and the kit manufacturer intends to sell that engine family in model year 2001, that engine family will be certified under option one for model year 2001.

For those kit manufacturers who are unable or unwilling to agree to the above conditions, the use of option three for the sale and installation of their kits will end as scheduled on June 30, 2000. For those kit manufacturers who avail themselves of the above extension, option three will end on December 31, 2001 and model year 2001. After that date and for model year 2002 and later, kit manufacturers must certify under either option one or two to avoid violating the provisions of the Clean Air Act. We do not intend to grant any more extensions.

We believe that the above conditional extension is the best way to move the alternative fuel vehicle industry toward federal new vehicle certification, which we believe offers the best means for insuring that all alternative fuel vehicles will meet all federal emission requirements for their full useful lives. The two model year extension should give those companies that are serious about remaining in the alternative fuel business and about manufacturing and selling clean alternative fuel vehicles sufficient time to certify in model year 2002.

The written notification of agreement with the conditions for extensions should be sent to the following address by June 30, 2000:

Bruce C. Buckheit, Director
Air Enforcement Division (2242A)
Office of Enforcement and
Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

Full certification plans for model year 2002 as required under the conditional extension should be sent to the following address:

Gregory Green, Director Certification and Compliance Division Office of Transportation and Air Quality Office of Air and Radiation 2000 Traverwood Drive Ann Arbor, MI 48105

Thank you for your letter inquiring about the Addendum and EPA's regulation of alternative fuel vehicles. We share your enthusiasm for the use of alternative fuels, which represent a tremendous potential for reducing harmful emissions. At the same time, however, we recognize both the harm to the environment and the image of alternative fuel vehicles that would be caused by allowing alternative fuel vehicles to be sold and driven on our roads without meeting federal emission requirements. To further facilitate Arizona's efforts to encourage the purchase of clean alternative fuel vehicles and trucks, I am enclosing a list of currently certified alternative fuel vehicles meeting option one. If you have any questions regarding this matter, please call me at (202) 564-2440 or Bruce Buckheit, Director of EPA's Air Enforcement Division, at (202) 564-2260.

Sincerely,

Steven A. Herman

Enclosure