

SUPPORTING STATEMENT FOR  
INFORMATION COLLECTION REQUEST RENEWAL:

**MOBILE AIR CONDITIONER RETROFITTING PROGRAM**

**1. IDENTIFICATION OF THE INFORMATION COLLECTION**

**1(a) Title and Number of the Information Collection**

This ICR is entitled " Mobile Air Conditioner Retrofitting Program (Renewal)," EPA ICR Number 1774.05, and OMB Number 2060-0350.

**1(b) Short Characterization**

The Significant New Alternatives Policy (SNAP) Program, under Section 612 of the Clean Air Act (CAA), enables the Agency to review available substitutes for ozone depleting substances (ODSs) and determine their acceptability. The Stratospheric Protection Division (SPD) is responsible for enacting regulations to phase out chemicals that damage the stratospheric ozone layer; therefore, pose a threat to human health and the environment. Depletion of stratospheric ozone can result in sharp increases in melanoma and non-melanoma cancers due to increased exposure to ultraviolet-A (UV-A) and ultraviolet-B (UV-B) radiation, and a higher incidence of cataracts (a leading cause of blindness). Under the SNAP program, companies submit applications of substitutes for ODSs. After all necessary information is received, SPD has 90 days to review the data submitted, and determine if the substitute is acceptable, unacceptable, or if its use must be restricted. For every submission, SPD reviews factors such as impact on human health and the environment, ozone depleting potential, atmospheric lifetime, global warming potential, and flammability. Because many substitutes are produced for multiple uses, SPD must determine what uses are appropriate based on the factors mentioned. Once SPD makes a decision of acceptability of a substitute, a Notice is published in the Federal Register listing acceptable substitutes under SNAP. If the substitute is found unacceptable or use restrictions are required, a notice-and-comment rulemaking is necessary. A comprehensive list of substitutes, their uses, and any relevant restrictions is maintained for distribution to interested parties.

SPD requires technicians retrofitting motor vehicle air conditioners (MVACs) containing ODS such as CFC-12 to use an approved SNAP substitute and to provide basic information on a label to be affixed to a visible section of the MVAC. The label must include the name of the substitute refrigerant, when and by whom the retrofit was performed, environmental and safety information about the substitute refrigerant, and other information. This information is needed so that subsequent technicians working on the MVAC system will be able to service the system properly, decreasing the likelihood of significant refrigerant emissions, cross-contamination and potential failure of air conditioning systems and refrigerant recovery/recycling equipment. EPA requires that when retrofitting CFC-12 MVAC systems with an approved SNAP refrigerant, the technician must first extract the CFC-12, and must install new fittings unique to that refrigerant.

EPA estimates that 6,500 technicians will be responsible for providing this information over the next 3 years, at a total cost (labor plus materials) of \$205,000.

## **2. NEED FOR AND USE OF THE COLLECTION**

### **2(a) Need and Authority for the Collection**

The SNAP program reviews potential alternatives to ozone-depleting refrigerants used in various sectors, including MVACs. When chlorofluorocarbons (CFCs), and specifically CFC-12, were phased out SPD faced the challenge of identifying acceptable alternative refrigerants that allowed consumers choice to retrofit CFC-12 MVAC systems to use alternatives. EPA notes that in the U.S., prior to the 1993 model year, MVACs used CFC-12 and that after 1995, original equipment manufacturers (OEMs) produced MVACs with HFC-134a. EPA estimates that there are currently approximately 3.3 million automobiles, originally designed to use CFC-12 in their MVACs, operating in the U.S. Of these, EPA estimates 7,000 (about 0.2%) or less will be retrofitted to use alternative refrigerants accepted for retrofitting between April 1, 2010 and March 31, 2013 (the term of this ICR). The remaining MVAC systems will either (1) continue to operate without service, (2) continue to operate with minor service including repairs and refilling with available supplies of CFC-12, (3) will be recycled or disposed of along with the entire motor vehicle, (4) will cease to function but will not be retrofitted, or (5) have already been retrofitted to an acceptable alternative refrigerant and will not be retrofitted again.

The purpose of this Information Collection Request (ICR) is to estimate the burden associated with the 40 CFR part, 82 subpart G requirements that service technicians label MVAC systems with information about new refrigerants when they retrofit a system. It is necessary to assess the time it will take for the service technician to fill out and place the label on the retrofitted air conditioner. This label will acknowledge that the retrofitting has been completed, and that the MVAC no longer uses CFC-12. In addition, the label provides essential information to technicians about the specific refrigerant used in the air conditioning system.

Section 612 of the CAA requires EPA to promulgate rules making it unlawful to replace any ODS with any substitute that the Administrator determines may present adverse effects to human health or the environment where the Administrator has identified an alternative that (1) reduces the overall risk to human health and the environment, and (2) is currently or potentially available. EPA is concerned that the existence of several substitutes in this end-use may increase the likelihood of significant refrigerant cross-contamination and potential failure of air conditioning systems and recovery/recycling equipment. In addition, continuing the smooth transition to substitutes strongly depends on the continued purity of the recovered, recycled and/or reclaimed CFC-12 supply.

### **2(b) Practical Utility/Users of the Data**

The purpose of the label is to alert service technicians and motor vehicle owners that the MVAC has been retrofitted to use an acceptable non-CFC refrigerant. The label will provide essential information to technicians about the specific refrigerant used in the air conditioning system. Technicians need this information to avoid service practices that might result in refrigerant cross-contamination and system failure.

### **3. NON DUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA**

#### **3(a) Non duplication**

The required label is put on CFC-12 air conditioners that are being retrofitted with an acceptable substitute. The label will be the only required mechanism to indicate the use of a substitute, and therefore will not be duplicative.

#### **3(b) Public Notice Required Prior to ICR Submission to OMB**

A Federal Register Notice (75 FR 7584) making this supporting statement available for public comment was submitted and published. No public comments were received.

#### **3(c) Consultations**

EPA consulted with the following individuals in preparing this ICR renewal:

- Ward Atkinson, Chairman of the Interior Climate Control Committee of Society of Automotive Engineers (SAE), (602) 956-9313, regarding the number of air conditioners likely to be retrofitted and the cost burden.
- Paul DeGuseppi, Mobile Air Conditioning Society Worldwide, (215) 631-7020, regarding the percent of air conditioners likely to be retrofitted.
- Jim Thomas, Refrigerant Services Inc., 902-468-4997, regarding the cost of labels.
- Doug Pettigrew, ICOR International, 317-826-3200, regarding the cost of labels.

#### **3(d) Effects Of Less Frequent Collection**

This ICR asks for information to be collected just once per MVAC retrofit.

#### **3(e) General Guidelines**

This ICR follows all of OMB's general guidelines for information collections.

#### **3(f) Confidentiality**

This ICR does not ask for any information that would be considered confidential.

#### **3(g) Sensitive Questions**

This ICR does not ask any questions concerning sexuality, religious beliefs, or other matters usually considered private.

### **4. THE RESPONDENTS AND THE INFORMATION REQUESTED**

#### **4(a) Respondents and SIC Codes**

The following is a list of Standard Industrial Classification (SIC) codes and associated industries that may retrofit a MVAC and therefore may be affected by information collection requirements covered under this ICR. Also listed is the corresponding North American Industry Classification System (NAICS) codes available from <http://www.census.gov/epcd/www/naics.html>.

<u>SIC code:</u>	<u>Type of Industry and NAICS code:</u>
551	New and used car dealers (NAICS code 441110)
554	Gas service stations (NAICS codes 447110 and 447190)
7532	Top and body repair shops (NAICS code 811121)
7538	General automotive repair shops (NAICS code 811111)
7539	Automotive repair shops not elsewhere classified, including air conditioning and radiator specialty shops (NAICS code 811198)

#### **4(b) Information Requested**

The Agency will not standardize the label, but rather allow the industry to devise a format that accommodates information about the refrigerants on the market. Unique fittings are necessary for different refrigerants in order to avoid cross contamination, as is the use of different colored labels for each refrigerant. EPA works with refrigerant developers to eliminate the risk of duplication. The person conducting the retrofit must apply to the MVAC in the engine compartment a label that contains the following information:

- The name and address of the technician and the company performing the retrofit.
- The date of the retrofit.
- The trade name, charge amount, and, when applicable, the numerical designation of the refrigerant as determined under the latest version of Standard 34 of the American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE), Inc..
- The type, manufacturer, and amount of lubricant used.
- If the refrigerant is or contains an ozone-depleting substance, the phrase "ozone depleter".
- If the refrigerant displays flammability limits as measured according to latest version of Standard E681 of the American Society for Testing and Materials (ASTM) International, the statement "This refrigerant is FLAMMABLE. Take appropriate precautions."

### **5. THE INFORMATION COLLECTED – AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT**

The Agency has not developed a format for the label and does not collect and compile the information provided on the label.

### **6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION**

#### **6(a) Estimating Respondent Burden**

EPA has not developed a standard label, but rather the manufacturers have the opportunity to produce unique labels to accompany their refrigerant. Much of the information required on the labels can be printed with the labels, thereby lessening the burden on the individual service shops, many of which are small businesses. These labels may also contain information about the specific fittings the service technician should use, with the subject refrigerant, to minimize the potential for cross-contamination due to several alternative refrigerant products on the market. EPA works closely with industry in carrying out these labeling requirements. Proper labeling results in considerable savings to industry and the public, since it greatly reduces the chance of refrigerant contamination. There are now 16 alternative refrigerants on the market listed under the SNAP program as acceptable replacements for CFC-12 for MVAC. However, only 13 of these alternative refrigerants are acceptable for retrofitting MVACs. Considerable costs would accrue if refrigerants were contaminated (mixed), including the costs to repair systems which failed as a result and the costs to recover, separate, reclaim and/or dispose of contaminated refrigerant.

To estimate the total number of retrofits to occur by July 31, 2010, the date this ICR will expire, the Agency analyzed publicly available data from the U.S. Department of Transportation, Bureau of Transportation Statistics, regarding vehicle sales per year. EPA assumed that the penetration of air conditioning in these vehicles rose linearly from 70% in 1970 to 98% in 1998 and remained at 98% thereafter. EPA assumed that 100% of the MVACs were designed for CFC-12 for years 1970 through 1991, 67% for 1992, 33% for 1993, and 0% thereafter. EPA assumed the lifetime of service of an air conditioner follows a Poisson distribution with an average lifetime of 12 years. Using this method, EPA estimates that there are currently approximately 3 million MVACs, originally designed to use CFC-12, operating in the U.S. Of these, EPA estimates 7000, or about 0.2%, will be retrofitted to use alternative refrigerants between May 1, 2010 and April 31, 2013 (the term after this ICR). The remaining MVACs either (1) will continue to operate without service, (2) will continue to operate with minor service including refilling with available supplies of CFC-12, (3) will be disposed or recycled along with the entire motor vehicle, (4) will cease to function but will not be retrofitted due to economic reasons, or (5) have already been retrofitted to an alternative refrigerant and will not be retrofitted again.

EPA estimates the time to complete and apply the required label at 5 minutes per MVAC.

### **6(b) Estimating Respondent Costs**

EPA estimates the cost per label to be \$0.10.

EPA estimates the time to complete and apply the label at 5 minutes per MVAC. Based on recent consultation with the industry, EPA uses an estimate of \$70 per hour loaded labor rate (includes: wages paid to the technician; benefits including paid leave, health insurance, retirement savings and legally required benefits; and overhead, including office space, furniture, equipment and computers, supplies and other business expenses). Thus the loaded labor cost per response is approximately \$5.83.

### **6(c) Estimating Agency Burden And Cost**

The data required on the label is not submitted to the EPA; therefore, the Agency burden and cost is zero.

#### **6(d) Estimating the Respondent Universe and Total Burden and Costs**

The U.S. Department of Labor statistics indicate there are 650,000 automotive service technicians and mechanics (SOC Code Number 49-3023) in the U.S. EPA estimates that 6,500 of them, or approximately 1% of the total, will be responsible for retrofitting the estimated 55,000 MVAC systems over the three-year term of this ICR.

EPA estimates the time to complete and apply the label at 5 minutes per MVAC, making the total burden 4,500 hours (1,500 hours per year). At an estimated average labor rate of \$70 per hour, the overall cost associated with the burden hours is \$315,000 (\$105,000 per year). The cost for designing, typesetting, printing and distributing 55,000 labels is estimated at \$0.10 per label to be \$5,500 (\$1,833.33 per year). Adding the labor and capital costs together yields a total cost burden of \$320,500 (\$106,833.33 per year).

#### **6(e) Bottom Line Burden Hours And Cost Tables**

As indicated in 6(c), there is no burden or cost to the Agency; therefore, the bottom-line burden hours and costs are equivalent to the respondent burden hours and costs:

burden hours:	1,500 hours per year
burden costs: direct:	\$1,833 per year
labor:	\$105,000 per year

#### **6(f) Reasons for Change in Burden**

Based on the decline of CFC-12 MVACs in service today EPA estimates a continued reduction in the number of CFC-12 MVACs retrofits that will occur during the next three years. After 1994, new cars in the US were no longer sold with CFC-12 MVACs. Thus, the number of operating cars with CFC-12 cars MVACs has decreased since the last ICR renewal. With fewer cars with CFC-12 MVACs, there will be fewer retrofits with substitute refrigerants and subject to this ICR.

#### **6(g) Burden Statement**

The annual public reporting and record keeping burden for this collection of information is estimated to average 5 minutes per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data

sources; complete and review the collection of information; and transmit or otherwise disclose the information.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR. Submit your comments, referencing Docket ID No. EPA-HQ-OAR-2009-0911 to (1) EPA online using [www.regulations.gov](http://www.regulations.gov) (our preferred method), by email to [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov) or by mail to: EPA Docket Center, Environmental Protection Agency, the Air and Radiation Docket, Mail Code 28221T, 1200 Pennsylvania Ave., NW, Washington, DC 20460, under Docket ID No. EPA-HQ-OAR-2009-0911. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202) 566-1742. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Please include the EPA Docket ID No. EPA-HQ-OAR-2009-0911 and OMB control number 2060-0350 in any correspondence.