



# Professional Technician Development Committee Information Report: 2007-3

## *Training and Certification Requirements for Servicing Motor Vehicle Air Conditioning Systems – Section 609 of the Clean Air Act of 1990*

Developed by the Technology & Maintenance Council's (TMC)  
PTDC Technician Qualification Task Force

### **ABSTRACT**

Section 609 of the Clean Air Act of 1990 (as amended) requires that motor vehicle air conditioning refrigerant be recycled, that only recover/recycle or recover-only equipment approved for a specific refrigerant be used in the repairing or servicing of motor vehicle air conditioners, and that technicians who repair or service motor vehicle air conditioners be trained and certified by an EPA-approved organization. In addition, service shops must be able to certify that they comply with these provisions of the Act.

Although the regulations promulgated under section 609 have been in effect since July 1992, there still exists some confusion among fleet managers about compliance, specifically surrounding the requirements for technician certification. This paper outlines section 609 technician certification requirements, identifies EPA-approved training and certification programs, and provides resources to guide the Fleet Manager in developing compliant motor vehicle air conditioning service and repair training and procedures within their organization.

Note that the scope of this paper is limited to motor vehicle air conditioning systems as defined under section 609 – mechanical vapor compression refrigeration equipment used to cool the driver's or passenger's compartment of the truck. It does not encompass the sealed refrigeration systems used for refrigerating cargo nor the systems used on passenger busses, and may not be applicable to some new auxiliary electrically-driven air conditioning units being developed and installed to comply with anti-idling requirements.

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## **BACKGROUND**

The purpose of this paper is to provide guidance to the truck service industry in developing technician training and certification programs to meet the requirements of section 609 of the Clean Air Act of 1990 (as amended).

Technicians that repair or service motor vehicle air conditioning systems must be trained and certified by an EPA-approved organization. Motor vehicle air conditioning systems, as defined by the Clean Air Act of 1990 (as amended) apply to mechanical vapor compression refrigeration equipment used to cool the driver's or passenger's compartment of any motor vehicle. Similar training and certification requirements for the hermetically sealed systems for refrigerating cargo exist and are covered under section 608 of the Clean Air Act of 1990 (as amended). A companion white paper, *Technician Qualification: Training and Certification Requirements for Servicing Motor Vehicle Air Conditioning Systems – Section 608 of the Clean Air Act of 1990*, provides similar guidance to fleet managers for systems covered under section 608.

The scope of this paper is limited to the training and certification requirements for individuals performing service on motor vehicle air conditioning systems that involves the handling of refrigerants, as described above. Other provisions of the Clean Air Act of 1990 (as amended) may be applicable to a fleet operation, including selection of approved refrigerant-handling equipment and recordkeeping requirements. The reader should review the provisions of the Act for applicability beyond the scope of the technician qualification issues discussed herein.

The training and certification requirements addressed herein are also limited to the requirements of section 609 of the Clean Air Act of 1990 (as amended). These requirements include the procedures to safely handle, recover and recycle, and retrofit refrigerants in

order to prevent detrimental environmental impacts to the earth's ozone layer. They do not address air conditioning diagnosis and repair skills and knowledge available through technical training provided by component and systems suppliers, nor the independent certification of the technicians knowledge of the skills required for diagnosing and repairing truck air conditioning systems such as that provided by ASE.

## **AUTHORITY**

Section 609 of the Clean Air Act of 1990 (as amended) is the authority under which the EPA promulgated rulemaking. Rules are contained in the Code of Federal Regulations, Chapter 40, section 82 under Subpart B – Servicing of Motor Vehicle Air Conditioners (40 CFR §82.30 et.seq.).

In summary, these rules provide that no person may repair or service motor vehicle air conditioning systems or perform any service involving the use of refrigerants for such systems without using EPA-approved equipment and without being properly trained and certified by an EPA-approved organization.

Failure to comply with these rules may expose the fleet to civil penalties or penalties at law. This exposure applies not only to the training and certification requirements for individuals performing service involving the use of refrigerants, but also to the requirements for utilizing approved equipment, recycling and disposal of refrigerants, and the recordkeeping requirements of the Act.

## **TRAINING AND CERTIFICATION REQUIREMENTS**

Training can be provided through one or more of the following means:

- a. On-the-job training.
- b. Self-study of instructional materials.
- c. Instructor-led training.

Certification test material must encompass the following subject areas:

- a. Use of recycling equipment in compliance with SAE Standard J-1989.
- b. Regulatory requirements.
- c. Importance of refrigerant containment.
- d. Effects of ozone depletion.

Testing programs must be approved by the Administrator of EPA. A list of approved testing programs is provided as Appendix A and is also available online at [www.epa.gov/ozone/title6/609/technicians/609certs.html](http://www.epa.gov/ozone/title6/609/technicians/609certs.html). Each approved organization must:

- a. Provide individual proof of certification, such as a certificate, display card, or wallet card, upon successful completion of the test.
- b. Conduct periodic review of test subject material and update the material to reflect the latest technological develop-

ments in motor vehicle air conditioning service and repair.

There are currently no requirements for recertification requirements, but this is subject to change.

Within these parameters, the training/certification options vary from self-study training materials that include or provide access to open-book certification tests, to off-site, instructor led training with a post-course certification test, to employer-specific on-the-job training and certification assessment. Costs range from about \$15.00 per certification up.

## **RESOURCES**

Approved section 609 technician certification programs and the types of training available are listed below:

## **PROGRAMS INTENDED SPECIFICALLY FOR THEIR OWN EMPLOYEES**

Jiffy Lube International  
P.O. Box 2967  
Houston, Texas 77252-2967  
(713) 546-4100

Los Angeles County Metropolitan  
Transportation Authority (MTA)  
900 Lyon Street  
Los Angeles, California 90012  
(213) 922-5159

Potomac Electric Power Company  
8400B Old Marlboro Pike  
Upper Marlboro, Maryland 20772  
(301) 967-5294

U.S. Army Ordnance Center and School  
Attn: ATSL-DI-TSED-U (Mr. Williams)  
Aberdeen Proving Ground  
Aberdeen, Maryland 21005-5201  
(410) 278-2302 or 278-9774

Whayne Supply Company  
P.O. Box 35900  
Louisville, KY 40323-5900  
(502) 774-4441

Yellow Freight System, Inc.  
10990 Roe Avenue  
P.O. Box 7270  
Overland Park, Kansas 66207  
(913) 345-3000

| <b>Provider</b>  | <b>Instructor-led</b> | <b>Self-Study</b> | <b>Internet</b> |
|--|-----------------------|-------------------|-----------------|
| AM General Corporation<br>13200 McKinley Highway<br>Mishawaka, Indiana 46545<br>(219) 258-3421   | X                     |                   |                 |
| ASE (National Institute for<br>Automotive Service Excellence)<br>101 Blue Seal Drive SE<br>Suite 101<br>Leesburg, Virginia 20175<br>(703) 669-6600 |                       | X                 | X               |
| E F Technical Institute, Inc.<br>1860 Crown Drive<br>Suite 1400<br>Dallas, TX 75234<br>(972) 831-8845  | X                     |                   |                 |
| ESCO Institute<br>1350 West Northwest Highways<br>Suite 205<br>Mount Prospect, IL 60056<br>(800) 726-9696  | X                     | X                 | X               |
| Ferris State University (FSU)<br>1201 S. State Street<br>Big Rapids, Michigan 49307<br>(866) 880-7674<br>(231) 591-2000                            | X                     | X                 |                 |
| The Greater Cleveland<br>Automobile Dealers' Association<br>10100 Brecksville Rd.<br>Brecksville, Ohio 44141<br>(440) 746-1500 or (888) 740-2886   | X                     | X                 |                 |
| Mainstream Engineering Corporation<br>200 Yellow Place<br>Rockledge, FL 32955<br>(407) 631-3550  | X                     | X                 | X               |
| Mechanic's Education Association<br>1805 Springfield Avenue<br>Maplewood, New Jersey 07040-2910<br>(973) 763-0086                                  | X                     |                   |                 |
| Mobile Air Conditioning Society (MACS) Worldwide<br>P.O. Box 88<br>Lansdale, PA 19446<br>(215) 631-7020<br>fax: (215) 631-7017                     | X                     |                   | X               |

| Provider  | Instructor-led | Self-Study | Internet |
|---|----------------|------------|----------|
| New York State Association of Service Stations and Repair Shops, Inc.<br>Automotive Technician Training Program<br>8 Elk Street<br>Albany, New York 12207<br>(518) 452-4367                                 | X              |            |          |
| New York State Department of Motor Vehicles,<br>Division of Vehicle Safety -<br>Technical Training Unit<br>Empire State Plaza<br>Swan Street Building, Room 111<br>Albany, New York 12228<br>(518) 474-4049 | X              |            |          |
| Pennsylvania College of Technology (PCT) /<br>Air Conditioning Contractors of America (ACCA)<br>One College Avenue<br>Williamsport, PA 17701-5799<br>(570) 327-4775   | X              |            |          |
| The Refrigeration School, Inc.<br>4210 East Washington, Street<br>Phoenix, Arizona 85034-1894<br>(802) 275-7133   | X              |            |          |
| Texas Engineering Extension Service<br>San Antonio Training Division<br>The Texas A&M University System<br>9350 South Presa<br>San Antonio, Texas 78223-4799<br>(210) 633-1000                              | X              |            |          |
| Universal Technical Institute<br>3823 North 34th Avenue<br>Phoenix, AZ 85017<br>(800) 859-7249  | X              | X          |          |
| Vatterott College<br>10265 St. Charles Rock Road<br>St. Louis, MO 63074<br>(314) 843-4200   | X              | X          |          |
| Wyoming Technical Institute (WyoTech)<br>4373 North 3rd Street<br>Laramie, Wyoming 82072<br>(307)755-2150<br>fax: (307)721-4854   | X              |            |          |