

Environmental Standard Operating Procedure (ESOP)	
Motor Vehicle Air Conditioning Refrigerant Operations (MVAC REF)	
Environmental Affairs: Air Resources (760)830-8480	Revised: 1 October 2024

Subject: MOTOR VEHICLE REFRIGERANT SYSTEM OPERATIONS AND MANAGEMENT

References: (a) 40 Code of Federal Regulations 82, Subpart B
(b) Clean Air Act (CAA), Title VI, Sections 604, 605, and 609

1. Purpose. This document provides environmental protection guidelines for the operation and maintenance of the motor vehicle refrigerant system aboard the Marine Air Ground Task Force Command (MAGTFTC), Marine Corps Air Ground Combat Center (MCAGCC). For further references to MAGTFTC, MCAGCC in this document, the term "installation" will be used.
2. Application. This guidance applies to those individuals who work with motor vehicle refrigerant systems aboard the installation. This includes any person who installs, repairs, maintains, services, replaces, recycles, or disposes of a motor vehicle air conditioner.
3. Motor vehicle air conditioners contain refrigerants that, on release, contribute to ozone depletion and global warming. Because of these harmful environmental impacts, federal and state regulatory programs are in place to contain the use and release of such refrigerants. The regulations apply to refrigerant recovery and service on motor vehicle air conditioning systems.
4. Procedures. Refrigerant operations must be managed in accordance with the references. This ESOP identifies management, inspections, tracking, and reporting measures that must be implemented by personnel aboard the installation to restrict release of refrigerants.
5. Operational Controls. The following controls apply:
 - a. **Registration Requirements**. All equipment used to evacuate refrigerant from Motor Vehicle Air Conditioning (MVAC) systems are required to be certified by a U.S. Environmental Protection Agency (USEPA) approved equipment testing organization and be registered with the USEPA. When new refrigerant recovery and recycling equipment is obtained, personnel must submit the Motor Vehicle Air Conditioning Refrigerant handling equipment registration form to the EA Air Resources Manager.
 - b. **Service Practices**.
 - (1) Do not add high-GWP refrigerants to any system that is known to have a leak, unless adding refrigerant for seasonal adjustment or to continue to operate to conduct a leak repair.
 - (2) **Technician Certification**. Any person who may perform service, maintenance, repair, or recovery work on refrigerant-containing equipment must be certified. Technicians and contractor technicians may only service equipment for which they are certified.

- (A) The type of certification depends on the type of appliance, as presented in Table 1.

Table 1. Maintenance and Equipment-specific Certifications

Type of Maintenance/Equipment		Certification Required
Non-Motor Vehicle Air Conditioning (non-MVAC)	Small Appliances (≤5 pounds of refrigerant)	Section 608 - Type I
	Medium, high, or very-high pressure	Section 608 - Type II
	Low pressure	Section 608 - Type III
MVAC (for example, passenger cars and trucks)		Section 609
MVAC-like (for example, military vehicles)		Section 609 or Section 608 - Type II
All types of equipment		Section 608 - Universal

- (B) A copy of the certification must be maintained at the place of business. This must be kept onsite until 3 years after the technician is no longer working as a technician.

- (3) Venting Prohibition. No person will intentionally release (vent) refrigerants into the atmosphere while maintaining, servicing, repairing, or disposing of heating, ventilating, air conditioning, and refrigerating equipment.
- (4) Evacuation Requirements. Technicians are required to evacuate the refrigerant to a system pressure of 102 mm Hg or less before disposing of MVAC-like (for example, military vehicles) appliances.
- (5) Recovery and Disposal. All recovery and recycling will be conducted using certified recovery equipment. Recovered refrigerants and filters used in the recovery process must be collected, stored, and disposed of through the EA's Hazardous Waste Program. No sales or contractual exchanges are allowed.

6. Documentation and Record Keeping. Records must be kept for at least 3 years. The following records must be readily accessible and maintained onsite:

- a. Technician certifications
- b. USEPA certifications for all refrigerant recovery devices

7. Training. All affected personnel must be trained in this document and the following:

- a. General Environmental Awareness training
- b. CAA Section 609 Certification

8. Emergency Preparedness and Response Procedures. Refer to the spill response procedures listed in the Abatement ESOP.

Subject: MOTOR VEHICLE AIR CONDITIONING REFRIGERANT OPERATIONS AND MANAGEMENT

9. Inspection and Corrective Action. The Environmental Compliance Coordinator (ECC) will confirm unit adherence to this ESOP. The ECC will confirm that unit personnel are trained in this ESOP and maintain appropriate documentation in accordance with this ESOP.

MOTOR VEHICLE AIR CONDITIONING REFRIGERANT HANDLING EQUIPMENT REGISTRATION FORM

All refrigerant recovery equipment used on motor vehicle air conditioning systems must be registered with the U.S. Environmental Protection Agency (USEPA). Please fill out the following table, verify that all equipment is properly certified, and provide this form along with copies of the unit's technician certifications to the Air Resources Program Manager via phone at 760-830-8480. The equipment certification sticker will state something to the effect of "This equipment has been certified by _____ to meet USEPA requirements."

Manufacturer	Model	Year	Serial number	Location (Building No.)	Unit
EXAMPLE: BlackMAX	TR700	2014	104258	2044	ESD

Equipment Certification Statement

I, _____, have verified that the equipment listed above has been certified by the USEPA or an organization approved by the USEPA.

Signature: _____ **Date:** _____