

Environmental Standard Operating Procedures (ESOP)	
Motor Vehicle Air Conditioning Refrigerant Operations (MVR)	
Environmental Affairs: Air Resources (760)830-8480	Revised: 1 October 2023

Subj: MOTOR VEHICLE REFRIGERANT SYSTEM OPERATIONS AND MANAGEMENT

Ref: (a) 40 CFR 82, Subpart B

(b) Clean Air Act (CAA), Title VI, Section 604, 605, and 609

1. Purpose. This document provides environmental protection guidelines for motor vehicle refrigerant system operations and management aboard the Marine Air Ground Task Force Command, Marine Corps Air Ground Combat Center (MAGTFTC, 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 MAGTFTC, MCAGCC Twentynine Palms. This includes any person who installs, repairs, maintains, services, replaces, recycles, or disposes of a motor vehicle air conditioner.

Motor vehicle air conditioners contain refrigerants that, upon release, contribute to ozone depletion and/or 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.

3. 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.

4. 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 an EPA-approved equipment testing organization and registered with the EPA. When new refrigerant recovery/recycling equipment is obtained, submit the Motor Vehicle Air Conditioning Refrigerant Handling Equipment Registration Form to the 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 in order 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:

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Type of Maintenance/Equipment Type		Certification Required
Non-Motor Vehicle Air Conditioning (non-MVAC)	Small Appliances (≤5 lbs of refrigerant)	Section 608 - Type I
	Medium, High, or Very-High Pressure	Section 608 - Type II
	Low-Pressure	Section 608 - Type III
MVAC (e.g., passenger cars and trucks)		Section 609
MVAC-like (e.g., military vehicles)		Section 609 or Section 608 - Type II
All types of equipment		Section 608 - Universal

(b) Maintain a copy of the certification at the place of business. This must be kept on-site until 3 years after the technician is no longer working as a technician.

(3) Venting Prohibition: No person shall intentionally release (vent) refrigerants into the atmosphere while maintaining, servicing, repairing, or disposing of HVAC&R equipment.

(4) Evacuation Requirements: Technicians are required to evacuate refrigerant to a system pressure of 102 mm Hg or less prior to disposing of MVAC-like (e.g., military vehicles) appliances.

(5) Recovery and Disposal: All recovery and recycling shall be conducted using certified recovery equipment. Recovered refrigerants as well as the filters used in the recovery process must be collected, stored, and disposed of through the EA Hazardous Waste Program. No sales or contractual exchanges are allowed.

5. Documentation and Record Keeping. Records must be kept for at least 3 years. The following records must be maintained for MVAC refrigerant system operations and management:

- a. Technician Certifications
- b. EPA Certifications for all refrigerant recovery devices

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

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

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

8. Inspection and Corrective Action. See listed Checklist for inspection requirements for 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 EPA. Please fill out the below 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 (Lilly Dugan, lillian.dugan@usmc.mil, 760-830-8480). Note that the equipment certification sticker will state something to the effect of "This equipment has been certified by _____ to meet EPA's requirements."

Manufacturer	Model	Year	Serial number	Location (Bldg #)	Unit
EXAMPLE: BlackMAX	TR700	2014	104258	2044	ESD

Equipment Certification Statement

I, _____, have verified that the equipment listed above has been certified by the United States Environmental Protection Agency or an organization approved by the United States Environmental Protection Agency.

Signature: _____ **Date:** _____