



The National Park Service EnviroFact Sheet

Environmental Management Program
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Managing Ozone-Depleting Substances/CFCs (G-9)

DRAFT

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“ODSs” are a group of chemicals that, if released, rise to the stratosphere where they destroy the ozone layer.

Ozone in the upper atmosphere is able to absorb lethal levels of ultraviolet radiation from the sun before those rays can reach the earth’s surface. Overexposure to UV radiation has been determined to cause an increase in skin cancer, cataracts and suppression of the human immune system.

The most common ODSs in parks are chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) which are used as refrigerants in park and concessioner equipment. Other ODSs may include halon and chlorinated solvents. ODS-containing equipment that may be found at parks include:

- Chillers, and window or mobile vehicle air conditioning units;
- Walk-in, household, and cold storage case refrigerators and freezers;
- Water coolers;
- Halon fire extinguishers and fire suppressant systems; and
- Methyl chloroform and Freon 113 solvent dip tanks.

FOR MORE INFO...

EPA Stratospheric Ozone Protection Division:

1-800-296-1996 (Hotline)

<http://www.epa.gov/ozone/desc.html>

APPLICABLE REGULATIONS

The Clean Air Act (CCA) required the production of chlorofluorocarbons (CFCs) in the United States to be phased out. However, the use of CFCs is still permitted, as long as supplies are available. Federal facilities were required to phase out the use of CFCs by December 31, 2001.

The CCA regulations at 40 CFR 82 contain several requirements pertaining to recovery and recycling of ozone-depleting substance (ODSs), including CFCs, with which federal facilities must comply.



USE OF APPROVED EQUIPMENT

Servicing of ODS-containing equipment must be done using **approved equipment** that meets Underwriters Laboratories (UL) standard 1963 and the Society of Automotive Engineers (SAE) standard J1991. Park shops must certify to the EPA that they own and use only approved equipment.

CFCs must be recycled by being either (1) recovered, treated, and returned to the vehicle/appliance for reuse, or (2) recovered and stored in a holding tank until such time that it is sent to an off-site reclamation facility.

TECHNICIAN CERTIFICATION REQUIREMENTS

Technicians who repair or service air conditioners must be certified by an EPA-approved organization. Technician certificates must be maintained **on-site**. The park is responsible for keeping the certificate on file for at least three years after the technician leaves the employ of the park.

LEAK DETECTION AND RELEASES

Regulations prohibit the intentional release of any Class I or II ODS. Also, the regulations include leak detection and repair requirements that are dependent upon the ODS charge.

Type and Capacity of System	Maximum Annual Leak Rate*	Repair Time Frame
Appliance containing 50 pounds or less of refrigerant	No requirement	No requirement
Appliance containing more than 50 pounds of refrigerant (except commercial and industrial process refrigeration equipment)	15% of charge	Within 30 days of detection
Commercial and industrial process refrigeration equipment	35% of charge	Within 30 days of detection

*Note: The “maximum annual leak rate” is a prorated amount and is not meant to imply that known leaks may be allowed to continue for that period of time.

RECORDKEEPING

Regulatory requirements necessitate certain recordkeeping obligations, including:

- A copy of the recycling/recovery equipment certification submitted to the state or EPA;
- Technician training certification;
- Service records documenting the date and type of service, and the quantity of refrigerant added (for appliances containing more than 50 pounds of charge); and
- The name and address of recyclers and the amount of refrigerant sent for recycling.

POLLUTION PREVENTION

- Evacuate and recover refrigerant before servicing to avoid releases.
- Visibly inspect hoses, connections and condenser for leaks. Consider purchase of an electronic device to detect leaks. Avoid using leak detecting products containing R-12.
- Do not mix refrigerants.

CFC MANAGEMENT COMPLIANCE CHECKLIST

Checklist Item	Notes
1. Determine whether your state has adopted regulations specific to the management of CFCs.	
2. Determine if leak detection monitoring is properly conducted and that records of such monitoring are maintained for all CFC-containing equipment with a charge of greater than 50 pounds (e.g., large refrigeration or cooling systems).	
3. Ensure that park personnel repairing or servicing CFC-containing equipment (either motor vehicle air conditioners, heating/cooling equipment or any other refrigeration devices) are properly trained and certified. The park must maintain copies of their certification.	
4. Ensure that CFC recycling and recovery equipment is certified by an approved equipment-testing organization.	
5. Ensure that CFCs are properly evacuated before the disposal of any CFC-containing equipment.	
6. Ensure that appropriate records are maintained regarding training, the use of approved equipment, and leak detection and repair.	