



United States
ENVIRONMENTAL PROTECTION AGENCY
Washington, DC 20460

Responsible Appliance Disposal (RAD) Program Annual Reporting Form
Office of Air & Radiation

INTRODUCTION

The U.S. EPA's Responsible Appliance Disposal (RAD) Program for utilities, municipalities, manufacturers, and retailers is a voluntary program that helps protect the ozone layer and reduce emissions of greenhouse gases. Through the Program, partners provide for the disposal of old refrigerators, freezers, dehumidifiers, and window air conditioning units using the best environmental practices available.

This reporting form will allow EPA to track and quantify the environmental benefits achieved by your program, and ultimately, those achieved by the RAD Program as a whole.

CONFIDENTIALITY

All information provided in this report will be considered strictly confidential. No company-specific information will be disclosed to the public; all company data will be aggregated into summary reports before being made available to the public.

INSTRUCTIONS

Please provide your contact and program information, as requested in the *Step 1* worksheet. Based on the types of refrigerated equipment handled by your program, please complete the corresponding *Step 2* worksheets to the best of your ability. This information will be used by the U.S. EPA to aggregate data on RAD Program benefits.

To help you complete the worksheets accurately, some common terms used in this reporting form are described below.

DEFINITIONS

Recover: To remove a material (in any condition) from an appliance and then store it externally without necessarily testing or processing it in any way.

Reclaim [refrigerant]: To reprocess refrigerant using specialized machinery to at least the requirements specified in the ARI Standard 700, Specifications for Fluorocarbon Refrigerants, and to verify using the analytical methodology prescribed in the Standard.

Recycle: To extract material from an appliance and process it for reuse. Recycling durable components, such as metals, rubber, plastic, and glass, entails reprocessing them for future use in other manufactured products, and not reuse of the appliance itself. When recycling used oil, refrigerants must be recovered from the used oil to the fullest extent possible, and the used oil cannot be mixed with used oil from sources other than refrigeration units.

Destroy: To cause the expiration of a controlled substance. Destruction does not result in a commercially useful end product. For refrigerant or foam-blowing agent, destruction must be performed in accordance with the guidelines in 40 CFR §82.3. For PCBs, which are found in capacitors manufactured before 1980, destruction must be in accordance with 40 CFR §761.

Dispose: Mercury waste, such as switches and relays, must be recovered from appliances prior to disposal or shredding, sent to a qualified recovery facility that has appropriate hazardous waste management permits, and managed in accordance with applicable federal, state, and local hazardous waste regulations (e.g., waste must be properly packaged prior to transport). The federal hazardous waste regulations under the Resource Conservation and Recovery Act (RCRA) can be found in 40 CFR §260 - 279. Used oil must be disposed in accordance with 40 CFR §279.81.

Energy Cost for Residential Consumers (\$/kWh): the energy cost paid by consumers, which may include a customer charge, distribution charge, transmission charge, transition charge, generation service charge, or other charges based on the electricity pricing scheme in your region.

SEND COMPLETED FORMS TO: Evelyn Swain, Stratospheric Protection Division

For Email:
swain.evelyn@epa.gov

For U.S. Postal Service:
U.S. EPA (6205J)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

For Private Courier:
U.S. EPA (6205J)
1310 L Street, NW, 10th Floor
Washington, DC 20005

BURDEN STATEMENT

The public reporting and recordkeeping burden for this collection of information is estimated to average 6 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.



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Step 1 - Contact Information

Program Owner: <input type="text"/>	Reporting Period: <input type="text"/> to <input type="text"/>
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<u>Primary Contact:</u>		<u>Alternate Contact:</u>	
Contact Name	<input type="text"/>	Contact Name	<input type="text"/>
Address	<input type="text"/>	Address	<input type="text"/>
	<input type="text"/>		<input type="text"/>
Daytime Phone	<input type="text"/>	Daytime Phone	<input type="text"/>
Fax	<input type="text"/>	Fax	<input type="text"/>
E-mail Address	<input type="text"/>	E-mail Address	<input type="text"/>

Program Information

Please select the appliance types included in your program:

- Refrigerator-Freezers
- Stand Alone Freezers
- Air Conditioning Units
- Dehumidifiers

Does your program provide an incentive (e.g., financial) to encourage disposal of old, working refrigerated appliances?

- Yes
- No

How many households are in the area served by your program?

Please list the name(s) and contact information of any third party contractor(s) used by your program to fulfill the requirements of the RAD Program (e.g., appliance collection, data tracking) and briefly describe their roles below.

Contractor Name	Contractor Role	Contact Name	Phone Number	Address
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Please complete the table below, providing information for each of the facilities your program uses for ODS reclamation and/or destruction.

Type of Facility (Destruction or Reclamation)	Facility Name	Address	Type of ODS Sent
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

If ODS appliance foam is destroyed through your program (in lieu of reclamation), please select the type of foam destruction technology that is used. If more than one destruction technology is used, please check the technology used to destroy the majority of ODS foam, and provide information on the additional technology/ies in the space provided below.

- Rotary Kiln Incinerator
- PCB Rotary Kiln Incinerator
- Municipal Solid Waste Incinerator (includes Waste to Energy Facilities)
- Other (specify technology and Destruction and Removal Efficiency [DRE])

Technology: DRE¹ (%):

Additional technology/ies used:

Technology 2: DRE¹ (%): ODS Types/Amounts Destroyed (lb):

Technology 3: DRE¹ (%): ODS Types/Amounts Destroyed (lb):

¹Destruction and Removal Efficiency (DRE) is determined by subtracting from the mass of a chemical fed into a destruction system during a specific period of time the mass of that chemical alone that is released in stack gases, and expressing that difference as a percentage of the mass of that chemical fed into the system.



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Step 2 - Program Results: Refrigerator-Freezers

Units Processed

Please complete the gray cells below.

Total Number of Units Processed

Number of Units With an Empty Refrigerant Charge

Average Age of Appliances Collected (yrs)

Program Data

Please complete the table below to provide the total amount of appliance components collected by your program during the current reporting period. Refer back to Page 1 for definitions of the fates for each component. For any fields that do not apply to your program, please enter "0" under "Total Amount." For every non-zero value entered in that column, indicate whether the quantity specified is based on Empirical Data or on Assumptions by checking the appropriate box. If your data is based on assumptions, please complete the shaded cells to the right of the check boxes. The information you provide on assumptions will be used for quality assurance purposes. If you wish to provide further information regarding your program data, please use the space for "Additional Comments" on the next page.

Appliance Component	Fate of Component	Total Amount	Total Amount Based On:		Assumption Details for Quality Assurance Purposes (if applicable)
			Empirical Data	Assumptions	
Refrigerant (including that recovered from compressor oil)	CFC-12				
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of refrigerant recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
	HFC-134a				
Foam Blowing Agent	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of refrigerant recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
	CFC-11				
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of CFC-11 recovered per unit
Used Oil	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of recovered foam per unit
	HCFC-141b				
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of HCFC-141b recovered per unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of recovered foam per unit
Metal	Recycled	(gal)	<input type="checkbox"/>	<input type="checkbox"/>	average gallons of used oil recovered per unit
	Disposed	(gal)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered used oil that is not recyclable
Rubber	Ferrous Metal Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of ferrous metal recovered per unit
	Non-Ferrous Metal Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of non-ferrous metal recovered per unit
Plastic	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of plastic recovered per unit
Glass	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of glass recovered per unit
Mercury-Containing Components	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of appliances that contain mercury-containing components
	Disposed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total mercury-containing components that are not recyclable
Capacitors	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total capacitors that were manufactured pre-1980

Consumers' Energy Savings Associated with Removal of Old Units in Current Period Dollars

Please complete the table below if an incentive is provided to equipment owners to encourage disposal of old, working appliances.

Average Number of Remaining Years of Useful Life	<input type="text"/>
Average Energy Consumed/Year/Unit (kWh)	<input type="text"/>
Average Energy Cost for Residential Consumers (\$/kWh) <i>(please provide the average cost during the current program period)</i>	<input type="text"/>

Additional Comments:

****If your program does not include stand alone freezers, please skip to Page 5****



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OMB Control No. 20XX-XXXX
Expiration Date: XX/XX/XX

Step 2 - Program Results: Stand Alone Freezers

Units Processed

Please complete the gray cells below.

Total Number of Units Processed

Number of Units With an Empty Refrigerant Charge

Average Age of Appliances Collected (yrs)

Program Data

Please complete the table below to provide the total amount of appliance components collected by your program during the current reporting period. Refer back to Page 1 for definitions of the fates for each component. For any fields that do not apply to your program, please enter "0" under "Total Amount." For every non-zero value entered in that column, indicate whether the quantity specified is based on Empirical Data or on Assumptions by checking the appropriate box. If your data is based on assumptions, please complete the shaded cells to the right of the check boxes. The information you provide on assumptions will be used for quality assurance purposes. If you wish to provide further information regarding your program data, please use the space for "Additional Comments" on the next page.

Appliance Component	Fate of Component	Total Amount	Total Amount Based On:		Assumption Details for Quality Assurance Purposes (if applicable)
			Empirical Data	Assumptions	
Refrigerant (including that recovered from compressor oil)	CFC-12				
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of refrigerant recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
	HCFC-22				
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of HCFC-22 recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
HFC-134a	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of refrigerant recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
Foam Blowing Agent	CFC-11				
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of CFC-11 recovered per unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of recovered foam per unit
	HCFC-141b				
Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of HCFC-141b recovered per unit	
Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of recovered foam per unit	
Used Oil	Recycled	(gal)	<input type="checkbox"/>	<input type="checkbox"/>	average gallons of used oil recovered per unit
	Disposed	(gal)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered used oil that is not recyclable
Metal	Ferrous Metal Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of ferrous metal recovered per unit
	Non-Ferrous Metal Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of non-ferrous metal recovered per unit
Rubber	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of rubber recovered per unit
Plastic	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of plastic recovered per unit
Glass	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of glass recovered per unit
Mercury-Containing Components	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of appliances that contain mercury-containing components
	Disposed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total mercury-containing components that are not recyclable
Capacitors	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total capacitors that were manufactured pre-1980

Consumers' Energy Savings Associated with Removal of Old Units in Current Period Dollars

Please complete the table below if an incentive is provided to equipment owners to encourage disposal of old, working appliances.

Average Number of Remaining Years of Useful Life	<input type="text"/>
Average Energy Consumed/Year/Unit (kWh)	<input type="text"/>
Average Energy Cost for Residential Consumers (\$/kWh) <i>[please provide the average cost during the current program period]</i>	<input type="text"/>

Additional Comments:



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Step 2 - Program Results: Air Conditioning Units

Units Processed

Please complete the gray cells below.

Total Number of Units Processed

Number of Units With an Empty Refrigerant Charge

Average Age of Appliances Collected (yrs)

Program Data

Please complete the table below to provide the total amount of appliance components collected by your program during the current reporting period. Refer back to Page 1 for definitions of the fates for each component. For any fields that do not apply to your program, please enter "0" under "Total Amount." For every non-zero value entered in that column, indicate whether the quantity specified is based on Empirical Data or on Assumptions by checking the appropriate box. If your data is based on assumptions, please complete the shaded cells to the right of the check boxes. The information you provide on assumptions will be used for quality assurance purposes. If you wish to provide further information regarding your program data, please use the space for "Additional Comments" on the next page.

Appliance Component	Fate of Component	Total Amount	Total Amount Based On:		Assumption Details for Quality Assurance Purposes (if applicable)
			Empirical Data	Assumptions	
Refrigerant (including that recovered from compressor oil)	HCFC-22				
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of refrigerant recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
	R-407C				
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of refrigerant recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
R-410A	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of refrigerant recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
Used Oil	Recycled	(gal)	<input type="checkbox"/>	<input type="checkbox"/>	average gallons of used oil recovered per unit
	Disposed	(gal)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered used oil that is not recyclable
Metal	Ferrous Metal Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of ferrous metal recovered per unit
	Non-Ferrous Metal Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of non-ferrous metal recovered per unit
Rubber	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of rubber recovered per unit
Plastic	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of plastic recovered per unit
Mercury-Containing Components	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of appliances that contain mercury-containing components
	Disposed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total mercury-containing components that are not recyclable
Capacitors	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total capacitors that were manufactured pre-1980

Consumers' Energy Savings Associated with Removal of Old Units in Current Period Dollars

Please complete the table below if an incentive is provided to equipment owners to encourage disposal of old, working appliances.

Average Number of Remaining Years of Useful Life	<input type="text"/>
Average Energy Consumed/Year/Unit (kWh)	<input type="text"/>
Average Energy Cost for Residential Consumers (\$/kWh) <i>(please provide the average cost during the current program period)</i>	<input type="text"/>

Additional Comments:

****If your program does not include dehumidifiers, please skip this section****



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OMB Control No. 20XX-XXXX
Expiration Date: XX/XX/XX

Step 2 - Program Results: Dehumidifiers

Units Processed

Please complete the gray cells below.

Total Number of Units Processed

Number of Units With an Empty Refrigerant Charge

Average Age of Appliances Collected (yrs)

Program Data

Please complete the table below to provide the total amount of appliance components collected by your program during the current reporting period. Refer back to Page 1 for definitions of the fates for each component. For any fields that do not apply to your program, please enter "0" under "Total Amount." For every non-zero value entered in that column, indicate whether the quantity specified is based on Empirical Data or on Assumptions by checking the appropriate box. If your data is based on assumptions, please complete the shaded cells to the right of the check boxes. The information you provide on assumptions will be used for quality assurance purposes. If you wish to provide further information regarding your program data, please use the space for "Additional Comments" on the next page.

Appliance Component	Fate of Component	Total Amount	Total Amount Based On:		Assumption Details for Quality Assurance Purposes (if applicable)
			Empirical Data	Assumptions	
Refrigerant (including that recovered from compressor oil)	HCFC-22				
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of refrigerant recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
	HFC-134a				
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of refrigerant recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
R-410A					
	Reclaimed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of refrigerant recovered per charged unit
	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered refrigerant that is not reclaimed due to contamination
Used Oil	Recycled	(gal)	<input type="checkbox"/>	<input type="checkbox"/>	average gallons of used oil recovered per unit
	Disposed	(gal)	<input type="checkbox"/>	<input type="checkbox"/>	% of total recovered used oil that is not recyclable
Metal	Ferrous Metal Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of ferrous metal recovered per unit
	Non-Ferrous Metal Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of non-ferrous metal recovered per unit
Rubber	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of rubber recovered per unit
Plastic	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	average pounds of plastic recovered per unit
Mercury-Containing Components					
	Recycled	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of appliances that contain mercury-containing components
	Disposed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total mercury-containing components that are not recyclable
Capacitors	Destroyed	(lb)	<input type="checkbox"/>	<input type="checkbox"/>	% of total capacitors that were manufactured pre-1980

Consumers' Energy Savings Associated with Removal of Old Units in Current Period Dollars

Please complete the table below if an incentive is provided to equipment owners to encourage disposal of old, working appliances.

Average Number of Remaining Years of Useful Life	<input type="text"/>
Average Energy Consumed/Year/Unit (kWh)	<input type="text"/>
Average Energy Cost for Residential Consumers (\$/kWh) <i>(please provide the average cost during the current program period)</i>	<input type="text"/>

Additional Comments: