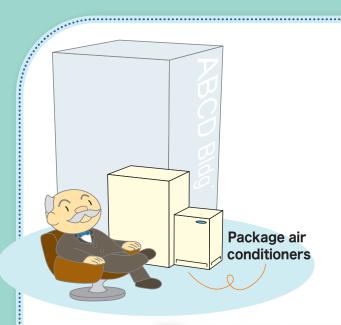
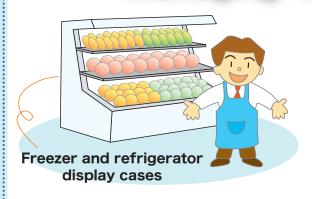
protecting the ozone layer and preventing global warming

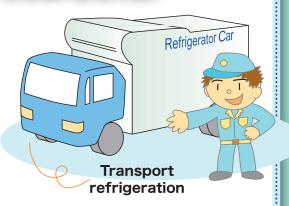
# Act on Rational Use and Proper Management of Fluorocarbons (Fluorocarbon Emissions Control Act)





# You are responsible for managing fluorocarbons!





Fluorocarbon management is required for commercial freezers, refrigerators, and air conditioners.

Please implement the law properly.

Ministry of the Environment

Ministry of Economy, Trade and Industry

Ministry of Land, Infrastructure, Transport and Tourism

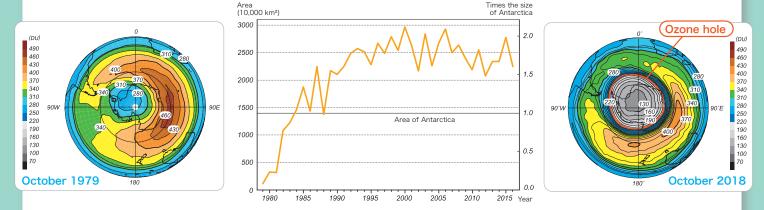
## What are fluorocarbons?

#### What are fluorocarbons?

- Fluorocarbons are compounds of fluorine and carbon. Under the Fluorocarbon Emissions Control Act, the term "fluorocarbons" includes chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs). The characteristics of fluorocarbons, which are chemically very stable and easy to handle with a low level of toxicity, has led to their use for a variety of purposes including foaming materials such as insulation, cleaning agents for semiconductors and precision parts, and aerosols, in addition to their use as refrigerants in appliances such as air conditioners and refrigerators.
- However, fluorocarbons destroy the ozone layer and contribute to global warming; and now that their environmental effects are understood, replacement by less harmful fluorocarbons and other substances is being promoted in fields where substitution is possible.

#### Impact on the ozone layer and countermeasures

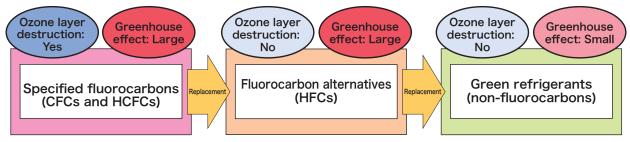
- The ozone layer of the stratosphere protects living things on earth by absorbing harmful ultraviolet radiation. When CFCs, HCFCs, and other fluorocarbons are released into the atmosphere, they reach the ozone layer and destroy ozone there.
- According to "Scientific Assessment of Ozone Depletion: 2018" by the World Meteorological Organization (WMO) and the United Nations Environmental Program (UNEP), the Antarctic ozone hole is expected to gradually shrink, returning to 1980 levels by the 2060s; however, continued action is necessary.



Change in yearly maximum area of ozone hole (middle graph) and monthly average ozone distribution over the southern hemisphere in October 1979 and October 2018 (left and right)

## Impact on global warming and countermeasures

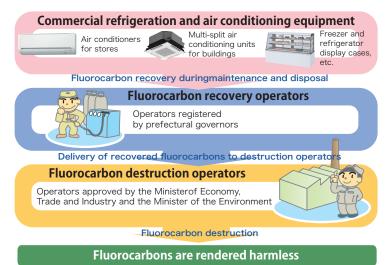
- The production and consumption of CFCs and HCFCs are regulated to protect the ozone layer, but these substances have severe greenhouse effects. A shift from CFCs and HCFCs mainly to HFCs (as a fluorocarbon alternative) is being promoted. However, although HFCs do not destroy the ozone layer, they also have large greenhouse effects that are 100 to 10,000 times the potency of carbon dioxide.
- Therefore, it is necessary to switch to non-fluorocarbon products with low global warming potential (GWP), and to control fluorocarbon emissions from products that are already using fluorocarbons (CFCs, HCFCs, and HFCs).



A proposal to revise the Montréal Protocol, an international framework regulating fluorocarbon production, by adding HFCs in addition to CFCs and HCFCs, was adopted in Kigali, Rwanda in October 2016 (the Kigali Amendment). The amendment came into effect on January 1, 2019 since it had been ratified by more than 20 countries.

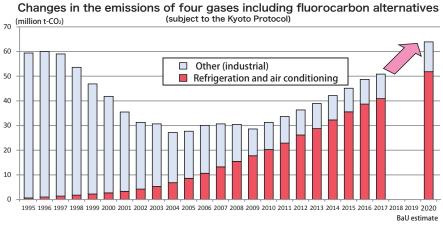
## **Enactment of the Fluorocarbon Recovery and Destruction Act**

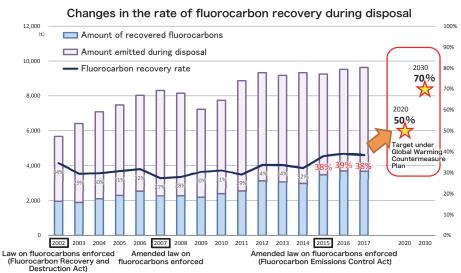
- Because fluorocarbons are a cause of ozone layer destruction and global warming, it is necessary to control their release into the atmosphere.
- Therefore, the Act on Ensuring Recovery and Destruction of Fluorocarbons Related to Specified Products (Fluorocarbon Recovery and Destruction Act) was enacted in 2001, promoting the recovery of fluorocarbons during maintenance and disposal of commercial refrigeration and air conditioning equipment, as well as measures such as destruction of recovered fluorocarbons.



#### **Amendment of the Fluorocarbon Emissions Control Act**

- However, it was necessary to take action with regard to the rapidly increasing use of refrigerant HFCs, the low rate of refrigerant recovery, and the high level of leakage that was discovered to be occurring during equipment use, in a manner informed by the changing situation regarding fluorocarbons, including advances in technical development and commercialization of non-fluorocarbon and low-GWP products, and a move toward worldwide regulation of HFCs.
- Therefore, the law was amended in June 2013 to include comprehensive measures across the entire life cycle of fluorocarbons, from manufacturing to disposal, in addition to the law's original scope of fluorocarbon recovery and destruction. The law's name was also changed to Act on Rational Use and Appropriate Management of Fluorocarbons (Fluorocarbon Emissions Control Act) (effective April 1, 2015).
- In addition, because the rate of fluorocarbon recovery during disposal had remained low for over 10 years at less than 40%, the law was amended in June 2019 with radical changes, including direct penalties for users who violate the law by failing to perform fluorocarbon recovery at the time of equipment disposal (effective April 1, 2020).





#### lote 1:

Four gases including fluorocarbon alternatives (HFCs, PFCs, SF6, and NF3) are subject to the Kyoto Protocol. (NF3 was added in the second commitment period, starting in 2013.) Among these four gases, emissions of HFCs are expected to increase rapidly due to an ongoing shift from CFCs and HCFCs to HFCs, mainly as refrigerants for refrigeration and air conditioning equipment.

#### Source:

Actual figures are from the Greenhouse Gas Inventory Report.
Estimated figures are from the Ministry of Economy, Trade and Industry.

#### Note 2:

The Global Warming Countermeasures Plan (May 2016 Cabinet decision) set the targeted rate for fluorocarbon recovery during disposal at 50% by 2020 and 70% by 2030. However, the actual rate remained below 40% for 10 years after the Fluorocarbon Recovery and Destruction Act came into effect.

#### Source

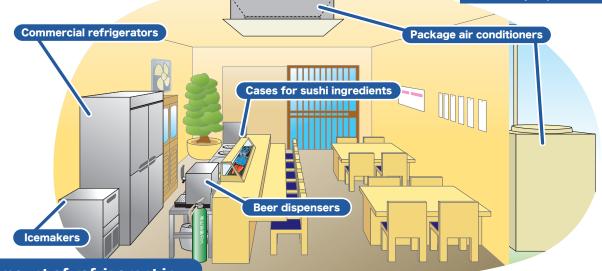
Report of the WG on Measures for Fluorocarbons, Chemical Policy Subcommittee, Manufacturing Industry Committee, Industrial Structure Council; and the Subcommittee on Measures for Fluorocarbons, Global Environment Committee, Central Environment Council: Aims concerning measures to increase the fluorocarbon recovery rate during disposal

## Common locations of commercial refrigeration and air conditioning equipment

In restaurants…

**Package air conditioners** This is the most commonly used type of air conditioner in various commercial buildings, ranging from small coffee shops to factories and entire buildings. A single outdoor unit may be able to support from one to 20 indoor units. Fluorocarbons circulate to the indoor units, which also come in various types and may be embedded in a ceiling, hung from a wall, or placed on a floor.

Amount of refrigerant: 2 to 200 kg/unit
Units currently in operation: 10 million units



Amount of refrigerant in household air conditioners:

Approximately 0.5 to 3 kg/unit

Amount of refrigerant: 0.1 to 0.5 kg/unit
Units currently in operation: 2.2 million units

#### **Commercial refrigerators**

These are used in the kitchens of restaurants and hotels. While a large household refrigerator may have a capacity of 400 to 500 liters, most commercial refrigerators have four doors and a capacity of 1,000 liters or more. There are commercial freezers, refrigerators, and combined refrigerator-freezers. Many have stainless steel interiors and exteriors.

In office buildings...

Water coolers These are used to cool drinking water, and include both tabletop and floor-standing units. Tabletop units are used in offices, with water supplied to a tank. Floor-mounted units are hooked up directly to the water supply and used in locations such as factories and public facilities.

Amount of refrigerant: 0.05 to 0.3 kg/unit Units currently in operation: 3.5 million units

**Turbo refrigerators** These are used for relatively large-scale applications such as building air-conditioning and industrial processes. The capacity varies widely, from 350 to 3,500 kW. Some are used for district heating and cooling. Because they support high-capacity operation all year round, they are often used in semiconductor plants and the like. Heat is carried by water to the cooling unit and heat radiating unit, and refrigerant is contained only in the refrigerating unit itself.

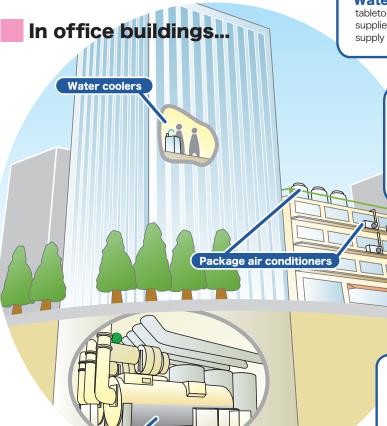
Amount of refrigerant: 100 to 10,000 kg/unit
Units currently in operation: 0.1 million units

**Chillers (chilling units)** In these systems, water or brine is cooled by integrated units with circulating refrigerant, and the cold water or brine is carried to the places where cooling is needed. They are used in a variety of applications, including refrigerated warehouses, process cooling in factories, and air conditioning. They range in size from very small to extremely large.

Amount of refrigerant: 1 to 100 kg/unit
Units currently in operation: 0.15 million units

**Screw refrigerators** These refrigerators can be used for a wide range of applications, from low-temperature refrigeration to air conditioning. They are used in refrigerated warehouses and refrigeration plants, and also for air conditioning. Their capacity ranges from 100 to 1,000 kW, and they are frequently used in medium to large-scale applications, second to turbo refrigerators. Cold and heat is carried by water or antifreeze to the places for cooling.

Amount of refrigerant: 90 to 300 kg/unit Units currently in operation: 0.03 million units



**Turbo refrigerators** 

## In supermarkets...

#### Gas-engine heat pump (GHP) air conditioners

These are used for air conditioning, the same as package air conditioners. Commercial electric power is used for the control system, but the compressor is driven by a gas engine, which has the advantage of reducing commercial electric power consumption. These are often used for air conditioning in suburban supermarkets and in school and agricultural air conditioning with low electric power capacity.

Amount of refrigerant: 3 to 200 kg/unit
Units currently in operation: 0.4 million units

Package air conditioners and GHP systems

## **Foods**

#### Freezer-refrigerator units

These refrigeration devices for prefabricated refrigerators are installed at collection and delivery stations and back rooms of supermarkets. Most are either integrated units installed through a prefab ceiling, or separate, like small package units.

Amount of refrigerant: 1.5 to 3 kg/unit
Units currently in operation: 0.5 million units

Freezer display cases

Refrigerated display cases

Amount of refrigerant: 2 to 20 kg/unit
Units currently in operation: 1 million units

## Amount of refrigerant: 0.05 to 2 kg/unit Units currently in operation: 2.8 million units

#### Display cases with separate condensing unit

Most refrigerated display cases in supermarkets and convenience stores are of this type. The condensing unit (enclosed unit equipped with a compressor) is installed outdoors, and the display cases are installed inside the store. A single condensing unit provides cooling for multiple display cases.

#### Display cases with built-in condensing unit

Many of these cases with a built-in condensing unit are small, including ice cream chest cabinets, dairy display cases, and tabletop display cases. Top-opening chest freezers for commercial use are included in this category, which also includes products such as small cases for sushi ingredients.

#### Around town...

#### Portable spot air conditioners

This is a type of package air conditioner, but the indoor and outdoor units are generally integrated, not separated. Cool air is blown toward workers through flexible ducts that come out of the unit. Some are moved on rollers, and some are placed on stands.

Portable spot air conditioners

Transport freezer and refrigerator units

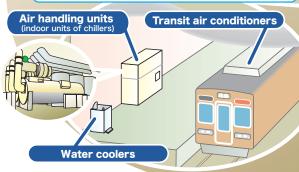
Amount of refrigerant: 1 to 5 kg/unit
Units currently in operation: 0.3 million units

#### Transport freezer and refrigerator units

These are cooling devices for the refrigerated compartments of refrigerated transport vehicles. The vehicle's engine turns the compressor to cool the refrigerated compartment. The refrigerant pipes are long, because radiators are located over the driver's seat or under the truck bed. They are used in vehicles ranging from small light trucks to large trucks. In addition, some are equipped with a dedicated engine to drive the compressor.

#### **Vending machines**

There are various types in addition to beverage vending machines, such as prepared food and fresh produce vending machines.



Commercial refrigeration and air conditioning equipment subject to the Fluorocarbon Emissions Control Act are called "class I specified products."

"Class I specified products" are commercial refrigeration and air conditioning equipment that use fluorocarbons as refrigerants. (Automotive air conditioners are not included because their fluorocarbon recovery, etc. is handled under the End-of-Life Vehicle Recycling Act.)

#### [Identifying class I specified products]

The following are some ways to identify these products:

- (1) Check the nameplate and stickers on outdoor units.

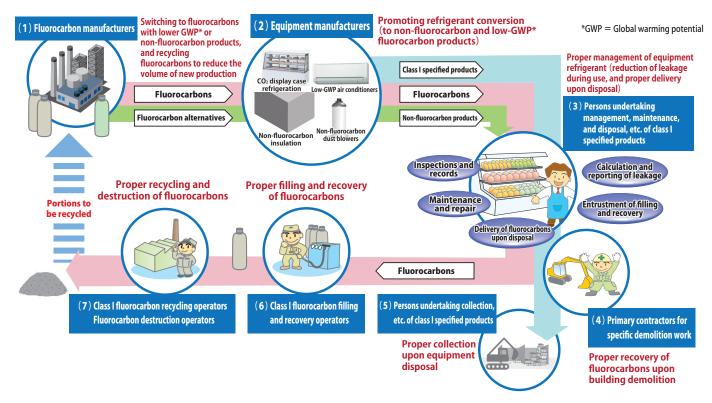
  Labeling is required on equipment sold since April 2002 (the time when the Fluorocarbon Recovery and Destruction Act was enforced), stating that it is a class I specified product, along with the types and amounts of fluorocarbons and other information. Equipment sold before that time was also labeled (with stickers) due to voluntary industry efforts.
- (2) Contact the equipment manufacturer or the vendor.

## In factories, ships, and other locations...

Refrigeration and air-conditioning equipment includes not only equipment for cooling, but also equipment for heating, such as heat pump hot-water supply devices.

## Overview of the Fluorocarbon Emissions Control Act

#### Overall life cycle of fluorocarbons



Under the Fluorocarbon Emissions Control Act, the matters handled by each party are generally as follows.

< Measures concerning the rational use of fluorocarbons >

#### (1) Fluorocarbon manufacturers

 Manufacturers, etc. of fluorocarbons will work to rationalize the use of fluorocarbons, including the manufacturing of fluorocarbon alternatives, in accordance with the "Standards of Judgment for Manufacturers, etc. of Fluorocarbons" which are to be determined by the national government.

#### (2) Equipment manufacturers

Manufacturers, etc. of specified equipment will work to reduce the environmental impact of fluorocarbon use, based on the "Standards of Judgment for Manufacturers, etc. of Designated Products" which are to be determined by the national government.

#### <Measures concerning appropriate management of fluorocarbons used in specified products>

#### (3) Persons undertaking management, maintenance, and disposal, etc. of class I specified products

- O Managers of class I specified products will conduct inspections, etc. of the class I specified products under their management, based on the "Standards of Judgment for Managers."
- Managers of products leaking more than a certain amount of fluorocarbons will report the calculated amount of leaked fluorocarbons, etc. to the national government. (The national government publicizes the calculated amounts of leaked fluorocarbons, etc.)
- When persons undertaking maintenance or disposal, etc. of class I specified products have a need for filling and recovery of fluorocarbons, or for equipment disposal, etc. (disposal or transfer for use as raw materials and parts), they will deliver the fluorocarbons or entrust filling and recovery to class I fluorocarbon filling and recovery operators.

#### (4) Primary contractors for specific demolition work

O Before demolition work, they will check for any class I specified products and explain the results by issuing documentation to the party ordering the specific demolition work.

#### (5) Persons undertaking collection, etc. of class I specified products

O When intending to collect discarded class I specified products, they will confirm that fluorocarbon recovery has been completed based on a copy, etc. of the collection certificate.

#### (6) Class I fluorocarbon filling and recovery operators

Class I fluorocarbon filling and recovery operators will perform filling and recovery in accordance with the filling standards and the recovery standards. If they will not recycle the recovered fluorocarbons themselves, they will deliver them to a class I fluorocarbon recycling operator or fluorocarbon destruction operator.

#### (7) Class I fluorocarbon recycling operators

Oclass I fluorocarbon recycling operators and fluorocarbon destruction operators will recycle or destroy the collected fluorocarbons in accordance with the fluorocarbon recycling standards and destruction standards.

#### Efforts by fluorocarbon manufacturers and product manufacturers, etc.

#### Fluorocarbon manufacturers

- Operators manufacturing or importing fluorocarbons will be asked to engage in the following efforts.
  - ① Switching to manufacturing or importing of low-GWP fluorocarbons or fluorocarbon alternatives
  - 2 Equipment preparation and technical improvement needed for alternative gas manufacturing, and fluorocarbon recovery, destruction, and recycling efforts

## Future outlook according to the national government

The government will indicate the future outlook for fluorocarbons (HFCs) used in Japan and announce it to fluorocarbon manufacturers, etc.

## Planning by business operators

Based on the government's outlook for fluorocarbons, etc., business operators will prepare and announce fluorocarbon use rationalization plans, including the following items.

- Targets for reducing fluorocarbon shipping volume indicators
- Matters related to equipment preparation and technical improvement, etc. for rational use of fluorocarbons

#### Visualization of efforts

The national government will ask business operators to report on their shipment equivalent volumes for each fiscal year after the end of that fiscal year. The government will hear, evaluate, and announce the opinions of councils concerning efforts by business operators in the next year after the reduction target.\*

\*This will be a mechanism for determining, evaluating, and announcing the breakdowns of major items handled by a business operator, while giving attention to the effect on competition due to announcing the manufactured amounts, etc. of individual types of fluorocarbons only in Japan.

#### Product manufacturers

- To promote switching to non-fluorocarbon and low-GWP in products using fluorocarbons, target values and target years will be established for manufacturers and importers of products such as household air conditioners (specified products), and a system will be introduced to seek target attainment as a weighted average in each product category shipped by a manufacturer or importer.
- Target values are defined for specified products in the following seven categories, based on the status of technical development of products that can use alternative refrigerant candidates as well as safety assessments, etc. Other products that are not currently covered will be considered as soon as the necessary conditions are met.

Specified product category	Main refrigerants currently used and GWP	Environmental impact target value	Target fiscal year
Household air conditioners (excluding through-the-wall types, etc.)	R410A(2090) R32(675)	750	2018
Air conditioners for stores and offices			
(1)Statutory refrigeration capacity of less than 3 tons, excluding floor-standing units, etc.	R410A(2090)	750	2020
(2)Statutory refrigeration capacity of at least 3 tons, excluding floor-standing units, etc., and excluding (3) below	R410A(2090)	750	2023
(3)Central air conditioners using turbo refrigerators	R134a(1430) R245fa(1030)	100	2023
Automotive air conditioners (excluding those installed in passenger cars having a capacity of 11 persons or more)	R134a(1430)	150	2023
Condensing units and stationary freezer-refrigerator units (excluding those having a compressor with rated output of 1.5 kW or less)	R404A(3920) R410A(2090) R407C(1770) CO <sub>2</sub> (1)	1500	2025
Central refrigeration equipment (only those shipped for use in new refrigerated warehouses having effective volume of at least 50,000 m³)		100	2019
Rigid urethane foam (only on-site foaming materials for residential buildings)	HFC-245fa(1030) HFC-365mfc(795)	100	2020
Spray equipment filled with propellant only (excluding those for applications requiring non-combustibility)	HFC-134a(1430) HFC-152a(124) CO₂(1)、DME(1)	10	2019

# Thorough refrigerant management by managers of commercial refrigeration and air conditioning equipment

As a general rule, the "manager" is the business or corporation that owns the product. However, as an exception in cases where contracts or other documentation stipulate that a party other than the owner is responsible for maintenance and repairs, that party is the manager instead.

#### Compliance with the "Standards of Judgment for Managers"

#### In ordinary times 1 Installation in appropriate locations • To prevent equipment damage, etc., the equipment is installed in an appropriate location, and the installation environment is maintained and protected. • Simple inspections are performed for all class I specified products (at least once every 3 months). (2) Inspection of equipment • Periodic inspections by experts are performed for certain types of class I specified products. Frequency of periodic inspections required by law Rated output of motor used by compressor, Inspection frequency Equipment category or output of engine driving compressor Equipment of 7.5 kW or more Refrigeration equipment At least once per year (Main types of equipment: Display cases with separate condensing unit, and freezer equipment freezer-refrigerator units, and chilling units for freezers and refrigerators) Equipment of 50 kW or more At least once per year (Main types of equipment: Central air conditioners) Air conditioners Equipment of at least 7.5 kW but less than 50 kW At leastonce every 3 years (Main types of equipment: Large store air conditioners, multi-split

#### Response when leakage is detected

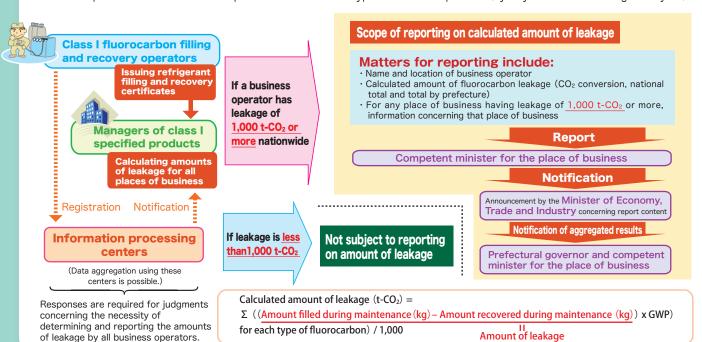
- 3 Leakage prevention measures; filling without repair generally prohibited
  - · When refrigerant leakage is confirmed, the equipment is inspected and the source of the leak is identified and repaired.
  - When leakage or malfunction is confirmed, filling with fluorocarbons without performing repairs is prohibited, as a general rule.

air conditioning units forbuildings, and gas heat pump air conditioners)

- 4 Keeping records on inspection history, etc.
  - For appropriate equipment management, records are to be prepared and retained on the history of equipment inspections and repairs, refrigerant filling and recovery, etc.
  - These records are to be disclosed upon request by maintenance operators, etc. at times of equipment maintenance.

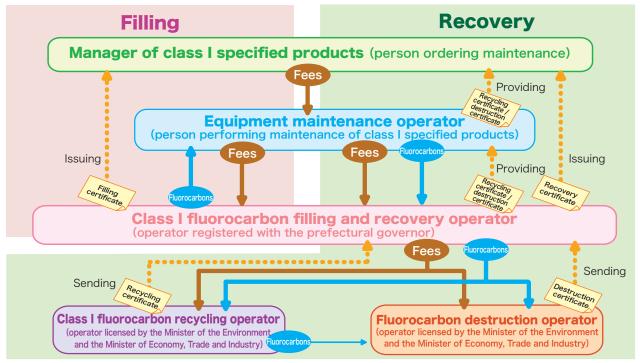
#### Reporting calculated amounts of leaked fluorocarbons

- Reports on calculated amounts of leaked fluorocarbons are made concerning the calculated amounts of leakage from commercial refrigeration and air conditioning equipment (class I specified products) managed by managers, for a corporation as a whole. (For franchise chains whose agreements specify the use of commercial refrigeration and air conditioning equipment, etc., leakage is calculated and reported for the chain as a whole.)
- The total amount of additional filling is considered to be the calculated amount of leakage, and managers calculate their amounts of leakage based on filling and recovery certificates issued by class I fluorocarbon filling and recovery operators.
- Reports are issued to the competent minister for the type of business operated (by July 31 of the following fiscal year).



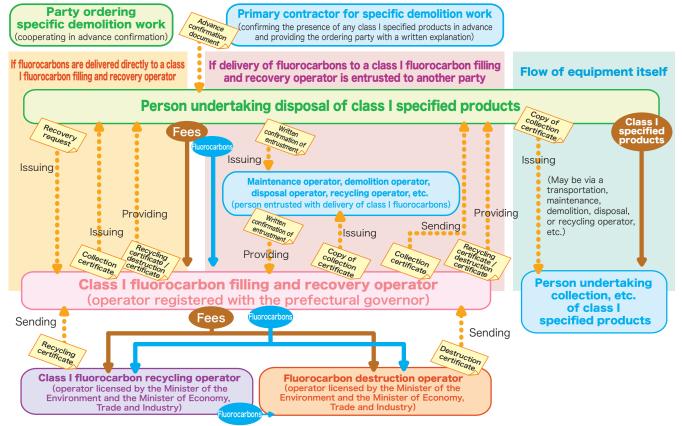
## Fluorocarbon filling, recovery, recycling, and destruction

## During maintenance



Those that could not be recycled by a class I fluorocarbon recycling operator

## During disposal, etc.



Those that could not be recycled by a class I fluorocarbon recycling operator

#### **Use of information processing centers**

- Instead of issuing filling certificates and recovery certificates, a class I fluorocarbon filling and recovery operator may register filling and recovery information with an information processing center. (Managers receive the information by electronic notification.)
- This has the advantage of enabling managers to manage the filling amounts and collection amounts electronically.



## List of obligations and penal provisions under the Fluorocarbon Emissions Control Act

The Fluorocarbon Emissions Control Act provides the following obligations and penalties for related parties for the purpose of controlling fluorocarbon emissions.

- ■Clause number abbreviations: "Art.18(1)" refers to Article 18, Paragraph 1, and "Art.104, (i)" refers to Article 104, Item (i).
- indicates matters subject to the guidance and supervision of the competent minister, and matters subject to the guidance and supervision of the prefectural governor.

		Guidance and advice			dvice	Penal provisions		
Obligated party	Obligation under the Fluorocarbon Emissions Control Act		Reco	nmen	dations			
					ublic	Indirect penalties (Art.104, (i) for	Direct penalties	
				annour	Orders	violations of orders)		
All parties	No releasing fluorocarbons from specified products without good reason (Art.86)				Ordero		Imprisonment for up to one year of fine of up to ¥500,000 (Art.103 (xiii))	
Fluorocarbon	Compliance with the standards of judgment for manufacturers, etc. of fluorocarbons (Art.9(1))						(May)	
manufacturers, etc.	Manufacturers whose production volume, etc. is 10,000 t-CO <sub>2</sub> or more					Fine of up to ¥500,000		
Specified product manufacturers,	Compliance with the standards of judgment for manufacturers, etc. of specified products (Art.12(1)) (Manufacturers who produce or import more than a certain amount)					Fine of up to ¥500,000		
etc.	Labeling of specified products (Art.14)					Fine of up to ¥500,000		
Specified product manufacturers, etc.	Labeling of specified products (Art.87)						Non-criminal fine of up to ¥100,000 (Art.109, (iii))	
Managers of	Compliance with the standards of judgment for managers (Art.16(1))					- Fire of our ha		
class I specified products	Managers having equipment of at least 7.5 kW					Fine of up to ¥500,000	Non principal fine of up to	
Persons ordering	Reporting on calculated amount of leaked fluorocarbons (Art.19)						Non-criminal fine of up to ¥100,000 (Art.109, (i))	
maintenance of class I specified products	Bearing the cost of fluorocarbon recovery, etc. (Art.74(6))							
	Entrustment of fluorocarbon filling (Art.37(1))					Fine of up to ¥500,000		
	Notification of manager's name, etc. when entrusting filling (Art.37(2))					Fine of up to ¥500,000		
Class	Entrustment of fluorocarbon recovery (Art.39(1))					Fine of up to ¥500,000		
I specified product maintenance operators	Notification of manager's name, etc. when entrusting recovery (Art.39(2))					Fine of up to ¥500,000		
	Fluorocarbon delivery other than refilling (Art.39(4))					Fine of up to ¥500,000		
	Issuing and retaining copies of recycling certificates (Art.59(3))					Fine of up to ¥500,000		
	Issuing and retaining copies of destruction certificates (Art.70(2) pursuant to Art.59(3) mutatis mutandis)					Fine of up to ¥500,000		
	Bearing the cost of fluorocarbon recovery, etc. (Art.74(3))						Fine of up to ¥500,000(Art.10	
	Fluorocarbon delivery (Art.41)				-	   Fine of up to   ¥500.000	(ii))	
	Issuing and retaining copies of written recovery requests and written confirmations of entrustment (Art.43(1)-(3))					Fine of up to	Fine of up to ¥300,000 (Art.10! (ii), (iii))	
Persons	Issuing and retaining copies of written consent for further					¥500,000 Fine of up to		
undertaking disposal, etc.	entrustment (Art.43(4))					¥500,000	Fine of up to ¥300.000 (Art.105	
of class I specified products	Retaining collection certificates (Art.45(3))					Fine of up to ¥500,000	(iv))	
	Reporting when collection certificates are not received, not filled out, or contain false statements (Art.45(4))					Fine of up to ¥500,000		
	Issuing copies of collection certificates (Art.45-2(1))					Fine of up to	Fine of up to ¥300,000 (Art.108 (v))	
	Bearing the cost of fluorocarbon recovery, etc. (Art.74(3)					¥500,000		
Parties ordering specific demolition	Cooperation with confirming whether class I specified products are in place							
work	Retaining explanatory documents (Art.42(3))							
Primary contractors for specific demolition work	Confirming and explaining whether class I specified products are in place, and retaining copies of explanatory documents (Art.42(1))							
Persons entrusted with	Receiving in advance and retaining written consent for further entrustment (Art.43(4))					Fine of up to ¥500,000		
delivery of class	Providing and retaining copies of written confirmations of entrustment (Art.43(5)-(7))					Fine of up to ¥500,000		
I fluorocarbons	Retaining copies of collection certificates					Fine of up to ¥500,000		

	Obligation under the Fluorocarbon Emissions Control Act	Gui	Guidance and advice			Penal provisions		
Obligated party			Recommendations		la d'anni anni dia			
					ublic ncements Orders	Indirect penalties (Art.104, (i) for violations of orders)	Direct penalties	
	Registration as filling and recovery operator (Art.27) and renewal (Art.30)						Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (i), (ii))	
	Notification of change in registration as filling and recovery operator (Art.31, (i))						Fine of up to ¥300,000 (Art.105, (i))	
	Notification of discontinuation, etc. as filling and recovery operator (Art.33, (i))						Non-criminal fine of up to ¥100,000 (Art.109, (ii))	
	Compliance with business suspension order (Art.35, (i))						Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (iii))	
	Compliance with filling standards (Art.37, (iii))					Fine of up to ¥500,000		
	Issuing filling certificates and recovery certificates (Art.37(4), Art.39(6))					Fine of up to ¥500,000		
	Registration of filling information, etc. with information processing centers (Art.38(1))					Fine of up to ¥500,000		
	Compliance with recovery standards (during maintenance) (Art.39(3), pursuant to Art.44(2))					Fine of up to ¥500,000		
	Collection of fluorocarbons (during maintenance) (Art.39(5))					Fine of up to ¥500.000		
	Registration of recovery information, etc. with information processing centers (Art.40(1))					Fine of up to ¥500.000		
Class I fluorocarbon	Collection of fluorocarbons (during disposal) (Art.44(1))					Fine of up to		
filling and recovery	Compliance with recovery standards (during disposal)					¥500,000 Fine of up to		
operators	(Art.44(2)) Issuing and sending collection certificates and issuing and					¥500,000 Fine of up to		
	retaining copies (Art.45(1),(2))					¥500,000 Fine of up to		
	Delivery of fluorocarbons (Art.46(1))  Compliance with transport standards (Art.46(2))					¥500,000 Fine of up to		
	(including persons entrusted)					¥500,000		
	Creating and retaining records of amounts filled, amounts recovered, etc. (Art.47(1))						Fine of up to ¥200,000 (Art.107, (i))	
	Allowing inspection of records of amounts filled, amounts recovered, etc. (Art.47(2))							
	Reporting on amounts filled, amounts recovered, etc. (Art.47(3))						Fine of up to ¥200,000 (Art.107, (ii))	
	Class I fluorocarbon recycling operations based on ministerial orders (Art.50(1))						Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (iv))	
	Providing and retaining copies of recycling certificates (Art.59(2))					Fine of up to ¥500,000		
	Providing and retaining copies of destruction certificates (Art.70(2) pursuant to Art.59(2) mutatis mutandis)					Fine of up to ¥500,000		
	Explaining fees for fluorocarbon recovery, etc. (Art.74(2))						Fine of up to ¥300,000 (Art.104, (v))	
Persons	Providing copies of collection certificates (Art.45-2(2))					Fine of up to ¥500,000		
undertaking collection, etc.	Retaining copies of collection certificates (Art.45-2(3))					Fine of up to	Fine of up to ¥300,000 (Art.105, (vi))	
of class I specified						¥500,000	Fi ( , , )/000 000 (A , 105 (""))	
products	No collection, etc. of class I specified products without confirming that no fluorocarbons remain in them (Art.45-2(4))				-	Fine of up to ¥500,000	Fine of up to ¥300,000 (Art.105, (iii))	
Class I fluorocarbon recycling operators and fluorocarbon destruction operators	License for recycling and destruction operations (Art.50(1), Art.63(1)), Renewal (Art.52(1), Art.65(1)), and license for changes (Art.53(1), Art.66(1))						Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (iv)-(vi),(viii)-(x))	
	Reporting changes (Art.53(3), Art.66(3))						Fine of up to ¥300,000 (Art.105, (i))	
	Reporting discontinuation, etc. (Art.54(1), Art.68)						Non-criminal fine of up to ¥100,000 (Art.109, (ii))	
	Compliance with business suspension order (Art.55, Art.67)						Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (vii),(xi))	
	Compliance with fluorocarbon recycling standards					Fine of up to ¥500,000	01 up to +300,000 (A11.103, (VII),(XI))	
	(Art.58(1)) (Recycling operators only) Delivery and collection of fluorocarbons (Art.58(2),					Fine of up to		
	Art.69(1)-(3))  Compliance with transport standards (Art.58(3))					¥500,000 Fine of up to		
	(Recycling operators only) Sending and retaining copies of recycling certificates and					¥500,000 Fine of up to		
	destruction certificates (Art.59(1), Art.70(1))  Recording and reporting amounts of recycling and					¥500,000	Fine of up to ¥200,000 (Art.107, (i), (ii))	
	distraction, etc. (Art.60(1),(3), Art.71(1),(3))  Compliance with fluorocarbon destruction standards					Fine of up to	1 1110 OT UP to +200,000 (ATL.107, (I), (II))	
	(Art.69(4)) (Destruction operators only)					¥500,000		

Notes:

Regarding the collection of reports (Article 91), failure to file a report and making false statements are punishable by a fine of up to ¥200,000 (Article 107, (ii)) (for fluorocarbon manufacturers and specified products manufacturers, etc., managers of class I specified products, class I specified product maintenance operators, persons undertaking disposal, etc. of class I specified products, primary contractors for specific demolition work, persons entrusted with delivery of class I fluorocarbons, class I fluorocarbon filling and recovery operators (including persons entrusted with transportation), and fluorocarbon destruction operators).

Refusal, obstruction, and avoidance of on-site inspections are punishable by a fine of up to ¥200,000 (Article 107, (iii)) (for fluorocarbon manufacturers and specified product manufacturers, etc., managers of class I specified products, class I specified product maintenance operators, persons undertaking disposal, etc. of class I specified products, primary contractors for specific demolition work, persons entrusted with delivery of class I fluorocarbons, class I fluorocarbon filling and recovery operators (including persons entrusted with transportation), persons undertaking collection, etc. of class I specified products, class I fluorocarbon recycling operators (including persons entrusted with transportation), and fluorocarbon destruction operators).

Reparding the collection of reports (Article 108).

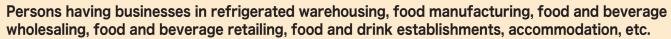
Regarding punishment by fines (excluding those under Article 103, (xii), cumulative imposition is applicable for corporations (Article 108).

## **Roles of related parties**

## Owners of commercial refrigeration and air conditioning equipment, etc.

#### Persons having offices, factories, or stores

- · Do you use package air conditioners or other air conditioning equipment?
- · Water coolers are included as commercial refrigeration equipment.
- · Cooling equipment for factory processes is also included.



· Do you use freezer equipment or refrigeration equipment such as commercial refrigerators and display cases?

#### Persons having rental businesses

· Do you rent commercial refrigerators or air conditioners?

#### Persons having ships or special commercial vehicles

· Do you use air conditioners for ships, fresh fish freezers, or freight compartments of refrigerated vehicles?

## Persons owning commercial refrigeration and air conditioning equipment using fluorocarbons are managers of class I specified products, and persons disposing of such equipment are persons undertaking disposal, etc. of class I specified products.

- Please note that disposal, etc. includes not only disposal when paying disposal fees, but also disposal by trade-in and disposal by sale such as selling to nonferrous metal scrap wholesalers, etc. for use as raw materials or parts.
- Transferring such equipment to others for reuse as secondhand equipment, whether for compensation or free of charge, does not make you a person undertaking disposal, etc. of class I specified products. In such cases, the used equipment vendor or other transferee is the manager of the equipment.
- Refrigerators, freezers, air conditioners, and other equipment manufactured for household use will be recycled according to the Home Appliance Recycling Act, even if they were used in settings such as offices. Please consult the vendor that sold the equipment.

#### ■Role of managers of class I specified products (Standards of Judgment for Managers (Article 16 of the Act), etc.)

- To prevent damage, etc. to class I specified products, they must be installed in an appropriate location, and the installation environment must be maintained and protected. (Article 16 of the Act)
- Simple inspections must be performed for all class I specified products. For class I specified products of at least a certain size, periodic inspections by experts are required. (Article 16 of the Act)
- · When leakage of fluorocarbons is confirmed, the source of the leak must be identified as soon as possible, except in cases where this is impossible, and the necessary measures must be taken. (Article 16 of the Act)
- For appropriate equipment management, the history of inspections, repairs, and refrigerant filling and recovery, etc. must be recorded for each class I specified product, and such records must be kept until three years have passed since the date when disposal, etc. of that class I specified product and delivery of its refrigerant was completed. (Article 16 of the Act)
- At the time of maintenance of a class I specified product, such records must be shown upon request by maintenance operators, etc. (Article 16 of the Act)
- · If fluorocarbon leakage exceeds a certain level, the calculated amount of leakage must be reported to the national government. (Article 19 of the Act)
- Persons intending to order demolition work of buildings, etc. are parties ordering specific demolition work, and they must cooperate with primary contractors for specific demolition work in confirming whether class I specified products are in place, and retain documentation concerning the results of such confirmation for three years. (Article 42 of the Act)
- · When ordering maintenance of class I specified products, managers must bear the necessary costs such as fluorocarbon recovery, recycling, and destruction. (Article 74 of the Act)

## ■Role of persons undertaking disposal, etc. of class I specified products [Regarding transfers of fluorocarbons and class I specified products]

- At the time of disposal, etc. of a class I specified product, unless a class I fluorocarbon filling and recovery operator has confirmed that the class I specified product is not filled with fluorocarbons, the fluorocarbons must be delivered to a class I fluorocarbon filling and recovery operator, either yourself or by entrusting another party. (Article 41 of the Act) At that time, you must bear the costs required for fluorocarbon recovery, recycling, destruction, etc. (Article 74 of the Act)
- At the time of disposal, etc. of a class I specified product, when delivering such product to a person undertaking collection, etc. of class I specified products, a copy of the collection certificate, etc. must be issued. (Article 45-2 of the Act)

#### [Regarding process management systems]

- At the time of disposal, etc. of a class I specified product, you must issue a written recovery request in the case of directly delivering fluorocarbons to a class I fluorocarbon filling and recovery operator, or a written confirmation of entrustment in the case of entrusting such delivery of fluorocarbons to a class I fluorocarbon filling and recovery operator to be performed by a maintenance operator, demolition operator, vendor, etc. (person entrusted with delivery of class I fluorocarbons) who is not registered as a class I fluorocarbon filling and recovery operator, and a copy thereof must be retained for three years. (Article 43 of the Act)
- If a person entrusted with delivery of class I fluorocarbons further entrusts the delivery of fluorocarbons to another party, the person undertaking disposal, etc. of class I specified products must issue a written consent for further entrustment, and a copy thereof must be retained for three years. (Article 43 of the Act)
- · When the recovery of fluorocarbons is completed, <u>you must obtain a collection certificate</u> issued or sent by a class I fluorocarbon filling and recovery operator, and retain that collection certificate for three years. (Article 45 of the Act)
- If the class I fluorocarbon filling and recovery operator has not issued or sent a collection certificate within 30 days after the written recovery request or written confirmation of entrustment was issued (within 90 days in cases of building demolition), this must be reported to the prefectural governor. (Article 45 of the Act)



## Maintenance operators of commercial refrigeration and air conditioning equipment

Persons having businesses in electrical equipment and appliance repair, air conditioning and heating equipment installation, refrigerated warehousing, food manufacturing, food and beverage wholesaling, equipment and appliance retailing, etc.

## The work of fluorocarbon filling and recovery during maintenance of commercial refrigeration and air conditioning equipment must be entrusted to a class I fluorocarbon filling and recovery operator.

- · When entrusting such work to a class I fluorocarbon filling and recovery operator, you must bear the costs required for fluorocarbon recovery, recycling, destruction, etc. (Article 74 of the Act) In addition, you must provide the class I fluorocarbon filling and recovery operator with information concerning the manager of the class I specified products whose maintenance you have ordered. (Article 37 and Article 39 of the Act)
- Unless the recovered fluorocarbons will be refilled into the equipment, the recovered fluorocarbons must be delivered to a class I fluorocarbon filling and recovery operator. (Article 39 of the Act)
- · When recycling certificates and destruction certificates are provided to you by a class I fluorocarbon recycling operator or fluorocarbon destruction operator, you must (without delay) provide them to the manager of the class I specified products and retain copies thereof (for three years). (Article 59 and Article 70 of the Act)

## To perform filling and recovery of fluorocarbons oneself, registration as a class I fluorocarbon filling and recovery operator is required.

#### [Business operators requiring registration as filling and recovery operators]

#### Equipment vendors, sales offices, management companies, etc.

If the company performs fluorocarbon filling and recovery work as part of equipment repairs and inspections.

#### Large refrigerated warehouses, large facilities, etc.

If the company has an equipment repair and service department and performs fluorocarbon filling and recovery work itself.

#### Factories and workplaces, etc.

If the company uses equipment in heating, cooling, or other processes, has an equipment repair and service department, and performs fluorocarbon filling and recovery work itself.

- You must either reuse fluorocarbons that are not refilled back into the equipment, or deliver them to a class I fluorocarbon recycling operator or fluorocarbon destruction operator. (Article 46 of the Act)
- The amounts, etc. of fluorocarbons recovered during recovery operations must be recorded and reported to the prefecture every fiscal year. (This does not include amounts refilled back into the equipment after collection.) (Article 47 of the Act)
- For more details, please consult the section on "Fluorocarbon refilling and recovery operators" on page 15.

## Sales, installation, and maintenance operators of commercial refrigeration and air conditioning equipment

Persons having businesses in electrical equipment and appliance wholesaling, equipment and appliance retailing, air conditioning and heating equipment installation, etc.

When replacing class I specified products, if you collect (for disposal or trade-in) used equipment filled with fluorocarbons from persons undertaking disposal, etc. of class I specified products, you are a person entrusted with delivery of class I fluorocarbons.

#### When you are a person entrusted with delivery of class I fluorocarbons

(If you collect secondhand equipment, you are the manager of such equipment, and not a person entrusted with delivery of class I fluorocarbons. If you later dispose of it, you will be a person undertaking disposal, etc. of class I specified products.)

- If you collect commercial refrigeration and air conditioning equipment filled with fluorocarbons, you will receive a written confirmation of entrustment issued by the ordering party (person undertaking disposal, etc. of class I specified products). You must provide the written confirmation of entrustment to the class I fluorocarbon filling and recovery operator, and retain a copy thereof for three years. (Article 43 of the Act)
- If you further entrust the delivery of fluorocarbons to a class I fluorocarbon filling and recovery operator to another party, you must obtain a written consent for further entrustment issued by the person undertaking disposal, etc. of class I specified products. In addition, you must retain the written consent for further entrustment for three years. (Article 43 of the Act)
- · If you receive a copy of a collection certificate issued by a class I fluorocarbon filling and recovery operator, you must retain it for three years. (Article 45 of the Act)
- · When the delivery of fluorocarbons to a class I fluorocarbon filling and recovery operator is entrusted to you, the ordering party (person undertaking disposal, etc. of class I specified products) bears the costs required for recovery, recycling, destruction, etc. (Article 74 of the Act)

## Roles of related parties

## Waste and recycling operators

Persons having businesses in iron scrap wholesaling, nonferrous metal scrap wholesaling, industrial waste collection and transportation, industrial waste disposal, etc.

If you dispose of products collected from a person undertaking disposal, etc. of class I specified products, or recycle such products as parts, etc., you are a person undertaking collection, etc. of class I specified products, and it is illegal for you to collect equipment whose fluorocarbon recovery cannot be confirmed.

#### When you are a person undertaking collection, etc. of class I specified products

- · You are prohibited from collecting class I specified products whose fluorocarbon recovery cannot be confirmed based on a copy of the collection certificate. (Article 45- 2 of the Act)
- · When receiving class I specified products for disposal, etc., you must receive a copy of the collection certificate issued by the person undertaking disposal, etc. of class I specified products. (Article 45-2 of the Act)
- If a person undertaking collection, etc. of class I specified products further entrusts disposal of the class I specified products subject to collection, etc., they must provide a copy of the collection certificate. (Article 45-2 of the Act)
- The person undertaking collection, etc. of class I specified products must keep the copy for three years. (If they further entrust disposal of the class I specified products subject to collection, etc., they must retain it until they provide the copy of the collection certificate to the entrusted party.) (Article 45-2 of the Act)

If you accept entrustment of fluorocarbon recovery in addition to equipment collection, etc., you are a class I fluorocarbon recovery and collection operator; and if you also accept entrustment of delivery of fluorocarbons to a class I fluorocarbon filling and recovery operator, you are a person entrusted with delivery of class I fluorocarbons.

• For more details, please consult the section on "Fluorocarbon refilling and recovery operators" on page 15, and the section on "When you are a person entrusted with delivery of class I fluorocarbons" on page 13.

## **Building demolition operators, etc.**

Persons having businesses in general constructor, scaffolding, earthwork, concrete, demolition, etc.



If you contract directly with a party who wishes to order building demolition work (other than a contractor) to provide building demolition work, you are a primary contractor for specific demolition work, unless it is clear that no commercial refrigeration or air conditioning equipment is in place.

- A primary contractor for specific demolition work <u>must confirm in advance whether any class I specified products are in place</u>, and issue documentation (advance confirmation document) to explain the results to the party ordering specific demolition work. A copy of that document must be retained for three years. (Article 42 of the Act)
- If any class I specified products are left in the building you have contracted to demolish, you must take care to keep unambiguous records concerning the status of fluorocarbon recovery from such equipment. For any class I specified products whose presence is confirmed by the advance confirmation, you must either have the party ordering specific demolition work recover the fluorocarbons in advance, or contract to provide services including delivery of fluorocarbons to a class I fluorocarbon filling and recovery operator.
- If you contract with the party ordering specific demolition work to deliver class I specified products to a person undertaking collection, etc. of class I specified products, you should deliver such equipment to the person undertaking collection, etc. of class I specified products along with a copy of the collection certificate.

If you contract to provide services including delivery of fluorocarbons to a class I fluorocarbon filling and recovery operator, you are a person entrusted with delivery of class I fluorocarbons.

• For more details, please consult the section on "When you are a person entrusted with delivery of class I fluorocarbons" on page 13.

## Fluorocarbon filling and recovery operators

Persons intending to engage in class I fluorocarbon filling and recovery operations



## You must register with the prefectural governor having jurisdiction over the area where you intend to conduct business. (Article 27 of the Act)

- · You must comply with the filling and recovery standards when filling or recovering fluorocarbons. (Article 37, Article 39, and Article 44 of the Act)
- When filling fluorocarbons or recovering them during maintenance, you must either issue a filling and recovery certificate to the manager who ordered maintenance of the class I specified product, or register the filling and recovery information with an information processing center. (Article 37 to Article 40 of the Act)
- · If class I specified product maintenance operators, persons undertaking disposal, etc. of class I specified products, or persons entrusted with delivery of class I fluorocarbons ask you to collect fluorocarbons, you must collect the fluorocarbons unless there is a valid reason. (Article 29 and Article 44 of the Act)
- · If class I specified product maintenance operators or persons undertaking disposal, etc. of class I specified products ask for explanations of fees related to fluorocarbon recovery, etc., you must provide such explanations. (Article 74 of the Act)
- If you collect fluorocarbons when disposing of class I specified products, you must issue a collection certificate and retain a copy thereof for three years. (Article 45 of the Act)
- · If you confirm that no fluorocarbons remain at the time of disposal of a class I specified product, you must issue a confirmation certificate and retain a copy thereof for three years. (Article 41 of the Act)
- · If you collect fluorocarbons, you must deliver them to a class I fluorocarbon recycling operator or a fluorocarbon destruction operator. (Article 46 of the Act)
- · After receiving a recycling or destruction certificate issued by a class I fluorocarbon recycling operator or a fluorocarbon destruction operator, you must provide it to the manager who ordered maintenance of the class I specified product or the class I specified product maintenance operator, and keep a copy thereof for three years. (Article 59 and Article 70 of the Act)
- · You must create records of the amounts of fluorocarbons that you fill and recover, retain the records for five years, and report to the prefecture every year (within 45 days after the end of the fiscal year). (Article 47 of the Act)
- · When filling or recovering fluorocarbons, you must have a person present who has adequate knowledge concerning fluorocarbon filling or fluorocarbon recovery, respectively.

## Fluorocarbon recycling and destruction operators

Persons intending to engage in the business of recycling or destruction of fluorocarbons filled in class I specified products as refrigerants

# You must obtain a license from the Minister of the Environment and the Minister of Economy, Trade and Industry for each place of business where you will perform operations. (Article 50 and Article 63 of the Act)

- · You must comply with the recycling and destruction standards when recycling or destroying fluorocarbons. (Article 58 and Article 69 of the Act)
- · When recycling or destroying fluorocarbons, you must send a recycling or destruction certificate to the class I fluorocarbon filling and recovery operator, and retain a copy thereof for three years. (Article 59 and Article 70 of the Act)
- · A class I fluorocarbon recycling operator must deliver fluorocarbons that were not recycled to a fluorocarbon destruction operator. (Article 58 of the Act)
- · If class I fluorocarbon filling and recovery operators or class I fluorocarbon recycling operators ask you to collect fluorocarbons, you must collect the fluorocarbons unless there is a valid reason. (Article 69 of the Act)
- · You must create records of the amounts of fluorocarbons that you recycle or destroy, retain the records for five years, and report to the national government every year (within 45 days after the end of the fiscal year). (Article 60 and Article 71 of the Act)

## **All parties**

Releasing fluorocarbons without good reason is subject to imprisonment of up to one year or a fine of up to ¥500,000.

## Contact information for inquiries, reports, and consultation

Responsible offices of prefectural governments\*

Hokkaido	Climate Change Countermeasures Division, Environment Bureau, Environment and Community Affairs Department	011-204-5190	Shiga Prefecture	Environmental Policy Division, Lake Biwa Environment Department	077-528-3357
Aomori Prefecture	Environmental Policy Division, Environment and Community Affairs Department	017-734-9249	Kyoto Prefecture	Environmental Management Division, Environmental Department	075-414-4709
lwate Prefecture	Environmental Protection Division, Environment and Community Affairs Department	019-629-5359	Osaka Prefecture	Industrial Waste Guidance Division, Recycling Promotion Office, Environment, Forestry, and Fishery Department	06-6210-9570
Miyagi Prefecture	Environmental Policy Division, Environment and Community Affairs Department	022-211-2661	Hyogo Prefecture	Water and Air Division, Environmental Management Bureau, Agriculture and Environment Department	078-362-3285
Akita Prefecture	Environmental Management Division, Community Affairs and Environment Department	018-860-1603	Nara Prefecture	Environmental Policy Division, Landscape and Environment Bureau, Creative Living Department	0742-27-8734
Yamagata Prefecture	Water and Air Environment Division, Environment and Energy Department	023-630-2339	Wakayama Prefecture	Environmental Management Division, Environmental Policy Bureau, Environment and Community Affairs Department	073-441-2688
	Water and Air Environment Division, Community Affairs and Environment Department	024-521-7261	Tottori Prefecture	Recycling Promotion Division, Community Affairs and Environment Department	0857-26-7198
Ibaraki Prefecture	Environmental Division, Community Affairs and Environment Department	029-301-2961	Shimane Prefecture	Environmental Policy Division, Environment and Community Affairs Department	0852-22-6444
Tochigi Prefecture	Environmental Protection Division, Environment and Forestry Department	028-623-3188	Okayama Prefecture	Environmental Planning Division, Environment and Culture Department	086-226-7299
Gunma	Environmental Protection Division, Environment Bureau, Forestry and Environment Department	027-226-2832	Hiroshima Prefecture	Environmental Protection Division, Environment and Citizens' Affairs Bureau	082-513-2920
Saitama Prefecture	Air Environment Division, Environmental Department	048-830-3058		Environmental Policy Division, Environment and Community Affairs Department	083-933-3034
Chiba Prefecture	Waste Guidance Department, Environment and Community Affairs Department	043-223-4658	Tokushima Prefecture	Environmental Guidance Division, Environmental Department	088-621-2267
Tokyo	Environmental Protection Division, Environmental Improvement Department, Environment Bureau	03-5388-3471	Kagawa Prefecture	Environmental Management Division, Environment and Forestry Department	087-832-3219
Kanagawa Prefecture	Air and Water Quality Division, Environmental Department, Environment and Agriculture Bureau	045-210-4111	Ehime Prefecture	Environmental Policy Division, Environment Bureau, Environmental Department	089-912-2347
Niigata Prefecture	Environmental Planning Division, Citizens' Affairs and Environment Department	025-280-5150	Kochi Prefecture	Environmental Division, Forestry and Environment Department	088-821-4524
Toyama Prefecture	Environmental Policy Division, Citizens' Affairs, Environment, and Culture Department	076-444-8727	Fukuoka Prefecture	Environmental Protection Division, Environmental Department	092-643-3360
Ishikawa Prefecture	Environmental Policy Division, Community Affairs and Environment Department	076-225-1463	Saga Prefecture	Environment Division, Environmental Department	0952-25-7774
Fukui Prefecture	Environmental Policy Division, Safety and Environment Department	0776-20-0303	Nagasaki Prefecture	Local Environment Division, Environmental Department	095-895-2356
	Environmental Improvement Division, Forestry and Environment Department	055-223-1515		Recycling Promotion Division, Environment Bureau, Environment and Community Affairs Department	096-333-2278
Nagano Prefecture	Recycling Promotion Division, Environmental Department	026-235-7164	Oita Prefecture	Recycling Promotion Division, Community Affairs and Environment Department	097-506-3136
Gifu Prefecture	Environmental Management Division, Environment and Community Affairs Department	058-272-8230	Miyazaki Prefecture	Environmental Management Division, Environment and Forestry Department	0985-26-7085
Shizuoka Prefecture	Environmental Policy Division, Environment Bureau, Citizens' Affairs and Environment Department	054-221-3781		Waste and Recycling Division, Environment and Forestry Department	099-286-2594
Aichi Prefecture	Water and Air Environment Division, Environmental Policy Department, Environment Bureau	052-954-6215	Okinawa Prefecture	Environmental Protection Division, Environmental Department	098-866-2236
Mie Prefecture	Climate Change Countermeasures Division, Environment and Community Affairs Department	059-224-2368			

#### Contact information for inquiries concerning the Fluorocarbon Emissions Control Act

#### **Ministry of the Environment**

Office of Fluorocarbons Control Policy, Climate Change Policy Division. Global Environment Bureau 1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8975 Tel. 03-3581-3351 (main)

http://www.env.go.jp/seisaku/list/ozone.html

#### Ministry of Economy, Trade and Industry

Fluoride Gases Management Office, Chemical Management Policy Division. Manufacturing Industries Bureau 1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8901

Tel. 03-3501-1511 (main)

http://www.meti.go.jp/policy/chemical management/ozone/index.html

#### ■ To confirm primary contractors for specific demolition work

By construction business license

[URL] http://www.mlit.go.jp/totikensangyo/const/1\_6\_bt\_000088.html

By the Construction Material Recycling Act and demolition business registration [URL] http://www.mlit.go.jp/sogoseisaku/region/recycle/d06link/index\_0601link.htm

the Construction Material Recycling Act (demolition business registration) overall

By the Construction Business Act (construction business license) and

#### Ministry of Land, Infrastructure, Transport and Tourism

Construction Industry Division, Land Economy and Construction Industries Bureau 2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo 100-8918 Tel. 03-5253-8111 (main) http://www.mlit.go.jp/totikensangyo/const/1\_6\_bt\_000283.html

- To confirm class I fluorocarbon filling and recovery operators Each prefecture has registration records that can be inspected.
- To confirm class I fluorocarbon recycling operators and fluorocarbon destruction operators Registration records can be inspected on the websites of the Ministry of the Environment and the Ministry of Economy, Trade and Industry.
  - For more details, please visit the website of the Fluorocarbon Emissions Control Act. http://www.env.go.jp/earth/furon/