

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



Ministry of Economy, Trade and Industry Ministry of Land, Infrastructure, Transport and Tourism

What are Fluorocarbons?

Fluorocarbons are chemical compounds containing fluorine and carbon. Under Japan's Act on Rational Use and Proper Management of Fluorocarbons (Fluorocarbon Emissions Control Act), chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs) are collectively referred to as "fluorocarbons". These chemicals have been widely used as refrigerants in air conditioners and refrigerators, foaming agents in insulation materials, cleaning agents for semiconductors and precision parts, and aerosol propellants as a result of their specific properties; they are chemically very stable, easy to handle, and low in toxicity.

Since scientists revealed that fluorocarbons caused destruction of the ozone layer and contribute to climate change, the Government of Japan has been promoting a transition to HFCs or alternatives with lower global warming potential (GWP) based on their technology availability.

Ozone Layer Depletion

- The stratospheric ozone layer protects life on earth by absorbing harmful ultraviolet radiation. However, when CFCs, HCFCs, and other fluorocarbons are released into the atmosphere, they rise into the stratosphere and cause depletion of the ozone layer through chemical reaction. The result is the so-called 'ozone hole' over the Antarctic.
- According to the "Scientific Assessment of Ozone Depletion: 2022" by the World Meteorological Organization (WMO) and the United Nations Environmental Program (UNEP), the Antarctic ozone hole is expected to gradually close, returning to 1980 values by around 2066.



Based on the data provided by Japan Meteorological Agency

Changes in annual maximum of the ozone hole area (center) and the total ozone maps over the Antarctic region in October (left and right)

Climate Change and Japan's Countermeasures

- To ensure ozone layer recovery, the Government of Japan has regulated the production and consumption of ozone depleting substances (ODS), promoting the replacement of CFCs and HCFCs with ozone-friendly HFCs. However, the high GWP of HFCs, which is hundreds to thousands times higher than carbon dioxide (CO₂), has gradually become a major issue.
- Today, the government is promoting a switch to natural refrigerants or low-GWP HFCs through the introduction of new equipment and the replacement of old. It is also essential to reduce emissions of all fluorocarbons (CFCs, HCFCs, and HFCs) from equipment that contains them.



HFCs have been added to the list of regulated chemicals under the Montréal Protocol, an international framework regulating ODS production and consumption. This addition, known as the Kigali amendment, was adopted in October 2016 and came into effect on January 1, 2019, following ratification by more than 20 countries.

Overview of the Fluorocarbon Emissions Control Act

Flow Chart of Fluorocarbon Life-Cycle



al government announces reporting amounts.) O When persons undertaking maintenance or disposal of Class I specified products have a need for filling and recovery of fluorocarbons or for equipment disposal (including disposal and transfer of all or part of a product for use as raw materials or parts in another product), they must entrust filling, recovery, and/or transfer of the fluorocarbons to a Class I fluorocarbon filling and recovery operator.

(4) Primary contractors for specific demolition work

 Before beginning work, primary contractors for specific building demolition work must confirm whether any Class I specified products are present in the structure and communicate the results by issuing documentation to the party ordering the demolition work.

(5) Persons undertaking collection of Class I specified products

 Persons planning to collect discarded Class I specified products must confirm that fluorocarbon recovery has been completed according to a copy of the collection certificate sent by persons undertaking the disposal of the products.

(6) Class I fluorocarbon filling and recovery operators

Class I fluorocarbon filling and recovery operators must undertake filling and recovery in accordance with the standards for filling and the standards for recovery. If they do not recycle any recovered fluorocarbons themselves, they must deliver them to Class I fluorocarbon recycling operators or fluorocarbon destruction operators.

(7) Class I fluorocarbon recycling and fluorocarbon destruction operators
Class I fluorocarbon recycling operators and fluorocarbon destruction operators must recycle or destroy the collected fluorocarbons in accordance with the standards for recycling of fluorocarbons and the standards for destruction of fluorocarbons.



Gas-engine heat pump (GHP) air conditioners In Supermarkets... 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 -Package air conditioners and GHP systems Freezer-refrigerator units These refrigeration devices for prefabricated Foods 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 Freezer display cases **Refrigerated display cases** Amount of refrigerant : 2 to 20 kg/unit Amount of refrigerant : 0.05 to 2 kg/unit Units currently in operation : 2.8 million Units currently in operation : 1 million Display cases with separate condensing unit Display cases with built-in condensing unit Most refrigerated display cases in supermarkets and conve-Many of these cases with a built-in condensing unit are small, including ice cream chest cabinets, dairy display cases, and nience stores are of this type. The condensing unit (enclosed unit equipped with a compressor) is installed outdoors, and tabletop display cases. Top-opening chest freezers for commercial the display cases are installed inside the store. A single use are included in this category, which also includes products condensing unit provides cooling for multiple display cases. such as small cases for sushi ingredients. Portable spot air conditioners Around Town... 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. Package air conditioners Amount of refrigerant: 1 to 5 kg/unit Units currently in operation : 0.3 million Portable spot Transport freezer and air conditioners refrigerator 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 8 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 is referred to as "Class I specified products". Air handling units Transport air conditioners 'Class I specified products" are commercial refrigerators and air conditioners using fluorocarbons. (Automobile air conditioners are not included because recovery of their refrigerants is handled under the End-of-Life Vehicle Recycling Act.) The following are some ways to identify **Class I specified 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). The label must state Water coolers that it is a Class I specified product, and must also give the types and amounts of fluorocarbons contained and other information. Equipment sold before that time was also labeled with stickers thanks to voluntary efforts by the industry. (2) Contact the equipment manufacturer or 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.

Reinforcement of measures for fluorocarbon manufacturers and designated product manufacturers

Required actions by fluorocarbon manufacturers and product manufacturers

Fluorocarbon manufacturers

• Fluorocarbon manufacturing or importing operators must endeavor to implement the following actions.

 Switch to the manufacture or import of low-GWP fluorocarbons or fluorocarbon alternatives.
 Update and implement technical improvements to equipment toward alternative gas manufacturing, as well as fluorocarbon recovery, destruction, and recycling efforts

HFC Consumption Targets

The Japanese government publishes HFC consumption targets for fluorocarbon manufacturers.

Planning by fluorocarbon manufacturers

Based on the HFC consumption targets, fluorocarbon manufacturers must submit a "plan for rationalization of fluorocarbon use" that includes the following items. • Reduction targets for fluorocarbon

 shipping volume indicators
 Matters related to equipment updating and technical improvement, etc. aiming at rational use of fluorocarbons

Publication of efforts

The government requires fluorocarbon manufacturers to report equivalent shipment volumes for each fiscal year after the end of that fiscal year. The government publishes an evaluation of manufacturers' reduction efforts based on the opinion of a council in the year following the year of the reduction target set by each manufacturer.*

*This mechanism is designed to publish an evaluation by understanding of the breakdown of major fluorocarbon manufacturing by each manufacturer, taking into account any possible effects on market competitiveness of public availability of the information provided only by manufactures operating in Japan.

Product manufacturers

- Under the designated product scheme, target values and target years are established for each designated product, such as room air conditioners, to promote transitioning to equipment using non-fluorocarbon or low-GWP refrigerants. Manufacturers and importers of designated products must meet their targets as a weighted average based on their shipping in each product category.
- Target values are established for designated products in the following 20 categories (as of February 2023), based on the current status of technical development of products that use alternative refrigerant candidates as well as safety assessments. Products that are not currently covered by these targets will be included 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				
Commercial air conditioners for stores and offices	Commercial air conditioners for stores and offices						
(1)Statutory refrigeration capacity of less than 3 tons, excluding floor-standing units, etc., and excluding (4) to (7) below.	R410A(2090)	750	2020				
(2)Statutory refrigeration capacity of at least 3 tons, excluding floor-standing units, etc., and excluding (3) to (7) below.	R410A(2090)	750	2023				
(3)Centrifugal chillers	R134a(1430) / R245fa(1030)	100	2025				
(4)Reciprocating liquid chiller for air conditioning	R410A(2090)	750	2027				
(5)Variable Refrigerant Flow systems for buildings (those installed in new buildings or those with replacement of all refrigerant piping, excluding those for use of cooling and heating at the same time and those for use in cold district)	R410A(2090)	750	2025				
(6)Gas engine heat pump air conditioners (those installed in new buildings or those with replacement of all refrigerant piping, excluding those for use of cooling and heating at the same time and those for use in cold district)	R410A(2090)	750	2027				
(7)Air conditioners for facilities (those installed in new buildings or those with replacement of all refrigerant piping, excluding those for specific use such as for those computers, those for use at medium temperature range, and all-in-one air conditioners)	R410A(2090)	750	2027				
Automotive air conditioners							
Automotive air conditioners (excluding those installed in passenger cars having a capacity of 11 persons or more)	R134a(1430)	150	2023				
Automobile air conditioner for buses (automobiles that carries 11 people or more) and trucks (automobiles used for freight shipment)	R134a(1430)	150	2029				
Condensing units and stationary refrigeration units (excluding those having a compressor with rated output of 1.5 kW or less)	R404A(3920) / R410A(2090) R407C(1770) / CO2(1)	1500	2025				
Refrigerate and freeze equipment combined unit for commercial use (those that have r	efrigerator and freezer within housing)						
Commercial refrigerator and freezer for commercial kitchen (Those where the refrigerant evaporates at above -45 degrees Celsius)	R134a(1430) / R404A(3920) R410A(2090) / R407C(1770)	150	2029				
Refrigerated display cabinets with incorporated motor compressors (compressor capacity is 750W or less)	CO2(1)	150	2029				
Refrigerator and freezer using rigid polyurethane foam	HFC-245fa(1030) / HFC-365mfc(795)	100	2024				
Vending machine with a refrigerating or freezing function using rigid polyurethane foam	HFC-245fa(1030) / HFC-365mfc(795)	100	2024				
Central refrigeration equipment (only those shipped for use in new refrigerated warehouses having effective volume of at least 50,000 m³)	R404A(3920) / Ammonia(<10)	100	2019				
Rigid polyurethane foam stock solution for residential use	HFC-245fa(1030) / HFC-365mfc(795)	100	2020				
Rigid polyurethane foam stock solution for use other than residential use	HFC-245fa(1030) / HFC-365mfc(795)	100	2024				
Heat insulating materials (using rigid polyurethane foam)	HFC-245fa(1030) / HFC-365mfc(795)	100	2024				
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				

Proper refrigerant management by managers of commercial refrigeration and air conditioning equipment

Standards of Judgment for Managers

As a general rule, the term "manager" refers to the business or corporation that owns the equipment. However, in cases where contracts or other documentation stipulate that a party other than the owner of the equipment is responsible for its maintenance and repair, then that party is considered the manager.

	In ordinary times								
	 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. 								
	 (2) Inspection of equipment Simple inspections are performed for all Class I specified products (at least once every 3 months). Periodic inspections by experts are performed for certain types of Class I specified products. 								
	Equipment category Refrigeration equipment and freezer equipment		Rated output of motor used by compressor, or output of engine driving compressor	Inspection frequency					
			Equipment of 7.5 kW or more (Main types of equipment: Display cases with separate condensing unit, freezer-refrigerator units, and chilling units for freezers and refrigerators)	At least once per year					
			Equipment of 50 kW or more (Main types of equipment: Central air conditioners)	At least once per year					
Air cond		Air conditioners	Equipment of at least 7.5 kW but less than 50 kW (Main types of equipment: Large store air conditioners, multi-split air conditioning units forbuildings, and gas heat pump air conditioners)	At leastonce every 3 years					
	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.

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.

Report on calculated amount of leaked fluorocarbons

- The amount of fluorocarbons that leak from commercial refrigeration and air conditioning equipment (Class I specified products) must be calculated and reported by the manager as part of the corporate reporting requirements. (For franchisors whose standard general conditions specify the use of commercial refrigeration and air conditioning equipment, the total leakage for all franchisees should be calculated and reported.)
- Leakage is considered to be the total amount of refrigerant refilling that takes place. The manager should calculate the amount of leakage based on filling and recovery certificates issued by a Class I fluorocarbon filling and recovery operator.
 The manager should report the calculated leakage amount to the ministers with jurisdiction over the business of the





Instead of issuing filling and recovery certificates, a Class I fluorocarbon filling and recovery operator may record filling and recovery information using the information processing center. (Managers then receive the information by electronic notification.) This enables managers to handle all filling and recovery data electronically.

Responsibilities of related parties

Business owners

The following business owners need to make sure the use of Class I specified products (commercial refrigeration and air conditioning equipment).



Business owners who own offices, factories, or stores • Your packaged air conditioners and other air conditioning equipment, water coolers, and factory cooling equipment are considered Class I specified products.

- Business owners who own refrigerated warehousing, food manufacturing, food and beverage wholesaling or retailing, restaurant, and accommodation businesses
- Your freezers equipment and refrigeration equipment, such as commercial refrigerators and display cases, are considered Class I specified products.

Business owners who engage in rental businesses

• The commercial refrigerators and air conditioners that you rent are considered Class I specified products.

Business owners who own ships or special commercial vehicles

Your ship air conditioners, fresh fish freezers, and refrigerated freight compartments of vehicles are considered Class I specified products.

If you own commercial refrigeration and air conditioning equipment using fluorocarbon refrigerants, you are a "manager of Class I specified products". When you dispose of such equipment, you are considered a "person undertaking the disposal, etc. of Class I specified products".

- Please note that "disposal, etc." means not only disposal by the payment of disposal fees, but also disposal by trade-in and by sale such as to a nonferrous metal scrap wholesaler for reuse as raw materials or parts.
- A transfer of the equipment to others as secondhand goods for reuse, whether for compensation or free of charge, does not make you "a person undertaking the disposal, etc. of Class I specified products." In such cases, the used equipment vendor or other transferee comes to be considered the manager of the equipment.
- Refrigerators, freezers, and air conditioners manufactured for household use must be recycled according to the Home Appliance Recycling Law, even if they were used in settings such as offices and commercial spaces. Please consult the vendor of the equipment for details.
- Responsibilities of managers of Class I specified products (Standards of Judgment for Managers of Class I Specified Products, Article 16 of the Act)
- To prevent damage to any Class I specified product, it must be installed in an appropriate location, and an appropriate 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 a certain minimum size, periodic inspections by experts are required. (Article 16 of the Act)
- If a fluorocarbon leak is confirmed, the location of the leak must be identified as soon as feasibly possible and the necessary measures must be taken. (Article 16 of the Act)
- To ensure proper management of the equipment, the inspection, repair, and refrigerant filling and recovery history must be recorded for each Class I specified product and the records must be kept until three years have elapsed after disposal of the product and delivery of the recovered refrigerant. (Article 16 of the Act)
- When maintenance is carried out on a Class I specified product, the above records must be shown to the maintenance operators on request. (Article 16 of the Act)
- If there is a fluorocarbon leak exceeding a certain level, the calculated leakage must be reported to the national government. (Article 19 of the Act)
- Persons intending to order the demolition of buildings are considered "parties ordering specific demolition work." They must cooperate with the primary contractor for the specific demolition work to confirm whether Class I specified products are present in the building and must retain documentation concerning the results of confirmation for three years. (Article 42 of the Act)
- When contracting for maintenance of Class I specified products, managers must cover costs such as fluorocarbon recovery, recycling, and destruction. (Article 74 of the Act)

Responsibilities of persons undertaking the disposal of Class I specified products [Regarding handling of fluorocarbons and Class I specified products]

- At the time of disposal of a Class I specified product, unless a Class I fluorocarbon filling and recovery operator has confirmed that the product is empty of fluorocarbons, the person undertaking the disposal must ensure that the fluorocarbons are delivered to a Class I fluorocarbon filling and recovery operator, either by themselves or by entrusting the task to another party. (Article 41 of the Act) At that time, they must cover the costs of fluorocarbon recovery, recycling, and destruction. (Article 74 of the Act)
- At the time of disposal of a Class I specified product, upon delivery of the product to a person undertaking the collection of Class I specified products, a person undertaking the disposal of the product must issue a copy of the collection certificate. (Article 45-2 of the Act)
 *A "collection certificate" is referred to as a document attesting to the collection of fluorocarbons which a Class I fluorocarbon filling and recovery operator must provide with a person undertaking the disposal after the collection of fluorocarbons contained in the discarded product completes.

[Regarding process management systems]

- At the time of disposal of a Class I specified product, the person undertaking the disposal must issue <u>a written recovery request</u> if they are to deliver the fluorocarbon refrigerants directly to <u>a Class I fluorocarbon filling and recovery operator</u>. <u>The person</u> <u>undertaking the disposal must issue a written confirmation of entrustment</u> if they contract with another party to deliver the refrigerants to a Class I fluorocarbon filling and recovery operator, and if that party is <u>a person entrusted</u> with the delivery of Class I fluorocarbons, such as a maintenance operator, demolition operator, or vendor, who is not registered as a Class I fluorocarbon filling and recovery operator. A copy of the recovery request and confirmation must be retained for three years. (Article 43 of the Act)
- If a person entrusted with the delivery of Class I fluorocarbons further entrusts the delivery of fluorocarbons to another party, the person undertaking the disposal of the product must issue written consent for the onward entrustment. A copy of the consent must be retained for three years. (Article 43 of the Act)
- When the recovery of fluorocarbons from the Class I specified product is completed by the Class I fluorocarbon filling and recovery operator, the person undertaking the disposal must receive a collection certificate issued or sent by the operator. The collection certificate must be retained 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 (or within 90 days in the case of building demolition), this must be reported to the prefectural governor. (Article 45 of the Act)



Responsibilities of related parties

Maintenance operators

The following applies to those who work 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 this work to a Class I fluorocarbon filling and recovery operator, the Class I specified products maintenance operator must cover the costs of fluorocarbon recovery, recycling, and destruction. (Article 74 of the Act) In addition, the maintenance operator must provide the filling and recovery operator with information concerning the manager of the Class I specified products who ordered the maintenance work. (Article 37 and Article 39 of the Act)
- Unless the equipment is refilled with the recovered fluorocarbons by the entrusted Class I fluorocarbon filling and recovery operator, the recovered fluorocarbons must be delivered to this I fluorocarbon filling and recovery operator. (Article 39 of the Act)
- When a recycling certificate or destruction certificate is provided to a Class I specified products maintenance operator by a Class I fluorocarbon recycling operator or fluorocarbon destruction operator, the maintenance operator must pass on the certificates to the manager of the Class I specified product without delay. The maintenance operator must retain a copy of the certificate for three years. (Article 59 and Article 70 of the Act)

To undertake fluorocarbon filling and recovery, a maintenance operator must register as a Class I fluorocarbon filling and recovery operator.

[Examples of business operators requiring registration as filling and recovery operators]

Equipment vendors, sales offices, and management companies

If the company undertakes fluorocarbon filling and recovery work as part of its equipment repair and inspection business.

Large refrigerated warehouses and other large facilities

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

Factories and workplaces

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

- If equipment is not refilled with recovered fluorocarbons, you must either reuse the recovered fluorocarbons or deliver them to a Class I fluorocarbon recycling operator or fluorocarbon destruction operator. (Article 46 of the Act)
- Amounts of fluorocarbons recovered during the recovery process must be recorded and reported to the prefecture every fiscal year. (This does not include amounts refilled back into the equipment after recovery.) (Article 47 of the Act)
- \cdot For more details, please consult the section "Fluorocarbon filling and recovery operators" on page 12.

Sales, installation, and maintenance operators

The following applies to businesses that engage in electrical equipment and appliance wholesaling, equipment and appliance retailing, air conditioning and heating equipment installation

When you collect an used Class I specified product containing a fluorocarbon refrigerant for disposal or trade-in from a person undertaking the disposal of Class I specified product, you are considered a "person entrusted with the delivery of Class I fluorocarbons".

A person entrusted with the delivery of Class I fluorocarbons must implement following actions.

(If you collect a Class I specified product and reuse it as second-hand equipment, you are considered a manager of this equipment. If you later dispose of the equipment, you will then be considered a person undertaking the disposal of Class I specified products.)

- When you collect commercial refrigeration and air conditioning equipment containing fluorocarbon refrigerants, you will receive a written confirmation of entrustment issued by the contracting party (the person undertaking the disposal of Class I specified products). You must provide this written confirmation of entrustment to the Class I fluorocarbon filling and recovery operator and retain a copy for three years. (Article 43 of the Act)
- If you further contract another party to deliver the fluorocarbons contained in a Class I specified product to a Class I fluorocarbon filling and recovery operator, you must obtain written consent for onward entrustment from the person undertaking the disposal of the product. In addition, you must retain the written consent for onward entrustment for onward entrustment for three years. (Article 43 of the Act)
- When 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 you are entrusted with the delivery of fluorocarbons to a Class I fluorocarbon filling and recovery operator, the ordering party (the person undertaking the disposal of Class I specified products) must cover the costs of recovery, recycling, and destruction. (Article 74 of the Act)

Waste and recycling operators

The following applies to those who work in ferrous metal 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 the disposal of Class I specified products, or if you recycle parts from such products, you are considered a "person undertaking collection of Class I specified products". It is illegal to collect such equipment that contains fluorocarbon refrigerants without a collection certificate provided by the person undertaking the disposal.

- A person undertaking collection of Class I specified product must implement following actions.
- You are prohibited from collecting a Class I specified product for which fluorocarbon recovery cannot be confirmed based on a copy of a collection certificate. (Article 45-2 of the Act)
- When receiving a Class I specified product for the disposal, you must obtain a copy of the collection certificate issued by the person undertaking the disposal of the product. (Article 45-2 of the Act)
- If you further contract the disposal of a Class I specified product that you have collected, <u>you must provide the</u> <u>entrusted party with a copy of the collection certificate.</u> (Article 45-2 of the Act)
- You must keep the copy of the collection certificate for three years. (If you further entrust the disposal of the Class I specified product that you have collected, you must retain the copy of the collection certificate until you provide a copy to that entrusted party.) (Article 45-2 of the Act)

If you carry out fluorocarbon recovery in addition to equipment collection, you are considered a "Class I fluorocarbon recovery and collection operator"; and if you also deliver the fluorocarbons to a Class I fluorocarbon filling and recovery operator, you are considered a "person entrusted with the delivery of Class I fluorocarbons".

• For more details, please consult the section "Fluorocarbon filling and recovery operators" on page 12, and the section "A person entrusted with the delivery of Class I fluorocarbons" on page 10.

Building demolition operators

The following applies to those engaging in general construction, scaffolding work, earthworks, concrete work, demolition, etc.



If you undertake contracts for demolition work directly from a party that orders building demolition work (other than a contractor), you are considered a "primary contractor for specific demolition work" unless it is clear that there is no commercial refrigeration or air conditioning equipment present in the building to be demolished.

- * "Specific Demolition work" means demolition work of all or part of a building or other structure (excluding any building or other structure in which Class I specified products are clearly not present).
- A primary contractor for specific demolition work must confirm in advance whether any Class I specified products are present and issue documentation (advance confirmation) to explain the results of the confirmation to the party ordering the specific demolition work. A copy of the advance confirmation must be retained for three years. (Article 42 of the Act)
- If any Class I specified products are found to be present in a building you have contracted to demolish, you are accountable for recovery of the fluorocarbons from the 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 the contracted demolition work must include provision of service for the delivery of the fluorocarbons to a Class I fluorocarbon filling and recovery operator.
- If the party ordering specific demolition work contracts you to deliver the Class I specified product of which the fluorocarbons contained have already been recovered to a person undertaking collection of Class I specified products, you must deliver the equipment to that person as contracted along with a copy of the collection certificate that is provided by the person undertaking the disposal of the product.

If your contracted demolition work includes provision of service for the delivery of the fluorocarbons to a Class I fluorocarbon filling and recovery operator, you are considered a "person entrusted with the delivery of Class I fluorocarbons".

• For more details, please consult the section "A person entrusted with the delivery of Class I fluorocarbons" on page 10.

Responsibilities of related parties

Fluorocarbon filling and recovery operators

The following applies to those 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 or recovering fluorocarbons during maintenance, you must either issue a filling or recovery certificate to the manager who ordered the maintenance work of the Class I specified product, or register the required filling or recovery information with the information processing center. (Article 37 to Article 40 of the Act)
- If you are contracted by a Class I specified product maintenance operator, person undertaking the disposal of Class I specified products, or person entrusted with the delivery of Class I fluorocarbons to recover fluorocarbon refrigerants, <u>you</u> must undertake recovery of the refrigerants unless there is a valid reason not to. (Article 29 and Article 44 of the Act)
- If a Class I specified product maintenance operator or person undertaking the disposal of Class I specified products asks for an explanation of the fees related to fluorocarbon recovery, you must provide such an explanation. (Article 74 of the Act)
- When you collect fluorocarbons as a result of disposing of a Class I specified product, you must issue a collection certificate and retain a copy for three years. (Article 45 of the Act)
- If you confirm that a Class I specified product that is intend to be disposed of by a person undertaking the disposal of the product is empty of fluorocarbons, you must issue a confirmation certificate and retain a copy for three years. (Article 41 of the Act)
- You must deliver any collected fluorocarbons 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 fluorocarbon destruction operator, you must provide it to the manager who ordered the maintenance work of the Class I specified product or the product maintenance operator and retain a copy for three years. (Article 59 and Article 70 of the Act)
- You must prepare records of the amounts of fluorocarbons that you fill and recover, retain the records for five years, and report the amounts to the prefecture every year (within 45 days after the end of the fiscal year). (Article 47 of the Act)
- When undertaking filling or recovering fluorocarbons, you must have a person present who has adequate knowledge of fluorocarbon filling or recovery.

Fluorocarbon recycling and destruction operators



The following applies to those intending to engage in the business of recycling or destruction of fluorocarbon refrigerants contained in Class I specified products.

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 operate. (Article 50 and Article 63 of the Act)

- \cdot You must comply with the recycling or 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 for three years. (Article 59 and Article 70 of the Act)
- A Class I fluorocarbon recycling operator must deliver any unrecycled fluorocarbons to a fluorocarbon destruction operator. (Article 58 of the Act)
- A fluorocarbon destruction operator must collect the fluorocarbons unless there is a valid reason not to, if a Class I fluorocarbon filling and recovery operator or Class I fluorocarbon recycling operator requests the collection of fluorocarbons. (Article 69 of the Act)
- You must prepare records of the amounts of fluorocarbons that you recycle or destroy, retain the records for five years, and report the amounts 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 a penalty of imprisonment of up to one year or a fine of up to ¥500,000.

The Fluorocarbon Recovery and Destruction Act

- To protect ozone layer and mitigate climate change, we must reduce emissions of fluorocarbons.
 - Japan enacted the Act on Ensuring Recovery and Destruction of Fluorocarbons Related to Specified Products (Fluorocarbon Recovery and Destruction Act) in 2001. This law obligated equipment users to recover fluorocarbon refrigerants from commercial refrigeration and air conditioning equipment during acts of maintenance and disposal, as well as to destroy the recovered refrigerants.

Commercial refrigeration and air conditioning equipment								
Air conditioners for retailers								
Fluorocarbon recovery during maintenance and disposal								
Fluorocarbon recovery operators Operators registered by prefectural governors								
Operators of fluorocarbon destruction facilities								
Operators approved by the Minister of Economy, Trade and Industry and the Minister of the Environment								
Eluorocarbon destruction								
Fluorocarbons are destroyed								

Revision to the act and the current scheme

- As issues such as a surge in the use of HFC refrigerants, low refrigerant recovery rates, and significant refrigerant leakage rates from operational equipment arose, a response became necessary. There was also a need to reflect in the law changes such as technological advances and the market-penetration of non-fluorocarbon and low-GWP products, as well as a global trend toward tighter HFC regulation.
- Thus, the law was amended in June 2013 to include comprehensive measures encompassing the life cycle of fluorocarbons, from manufacturing to disposal. Since this expanded on the initial scope of the law - fluorocarbon recovery and destruction - the legislation was renamed the Act on Rational Use and Proper Management of Fluorocarbons (Fluorocarbon Emissions Control Act). The revised act became effective on April 1, 2015.
- In June 2019, the Fluorocarbon Emissions Control Act was amended in order to increase the recovery rate of fluorocarbon refrigerants during disposal, which had remained low at less than 40% for over 10 years. Major changes were made, including the addition of direct penalties for users who violate the law by failing to recover fluorocarbons at the time of equipment disposal. The amendment became effective on April 1, 2020.



Of emissions of F-gases, HFCs

Note 1:

Note 2:

emissions are increasing most rapidly due to the ongoing shift from CFCs and HCFCs to HFCs, mainly as refrigerants in refrigeration and air conditioning equipment.

Source: The National Greenhouse Gas Inventory Report.

The Global Warming Countermeasures

2021) set a target rate for fluorocarbon recovery during disposal of 60%

Plan (cabinet decision of October

by 2025 and 75% by 2030.



Source Ministry of the Environment

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

Note:

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 indicates matters subject to the guidance and supervision of the prefectural governor.

		Guidance and advice			vice	Penal provisions			
	Obligation under the Fluorocarbon Emissions Control Act			Reco	nmendations				
Obligated party						ublic	Art 104 (i) for	Direct nenalties	
					announ	cements	violations of orders)	Direct penalties	
						Orders			
All parties	No releasing fluorocarbons from specified products without good reason (Art.86)							Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (xiii))	
Fluorocarbon manufacturers.	Complianc manufacture	e with the standards of judgment for rs, etc. of fluorocarbons (Art.9(1))							
etc.		Manufacturers whose production volume, etc. is $10,000 \text{ t-CO}_2$ or more					Fine of up to ¥500,000		
Designated product manufacturers,	Complianc manufacture (Manufactu certain amou	e with the standards of judgment for rs, etc. of designated products (Art.12(1)) rers who produce or import more than a nt)					Fine of up to ¥500,000		
etc.	Labeling of d	esignated products (Art.14)					Fine of up to ¥500,000		
Specified product manufacturers, etc.	Labeling of s	pecified products (Art.87)						Non-criminal fine of up to ¥100,000 (Art.109, (iii))	
NA	Compliance (Art.16(1))	vith the standards of judgment for managers							
Class I specified		Managers having equipment of at least 7.5 kW					Fine of up to ¥500,000		
products	Reporting or (Art.19)	calculated amount of leaked fluorocarbons						Non-criminal fine of up to ¥100,000 (Art.109, (i))	
Persons ordering maintenance of Class I specified products		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		
l specified product	Notification recovery (Ar	of manager's name, etc. when entrusting t.39(2))					Fine of up to ¥500,000		
maintenance operators	Fluorocarbor	delivery other than refilling (Art.39(4))					Fine of up to ¥500,000		
	Issuing and (Art.59(3))	retaining copies of recycling certificates					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 o	ost of fluorocarbon recovery, etc. (Art.74(3))							
	Fluorocarbon delivery (Art.41)						Fine of up to	Fine of up to ¥500,000(Art.104, (ii))	
						¥500,000	Fine of up to ¥300,000 (Art.105,		
	Issuing and retaining copies of written recovery requests and written confirmations of entrustment (Art.43(1)-(3))						Fine of up to	(ii), (iii))	
Persons	Issuing and retaining copies of written consent for further						Fine of up to		
disposal, etc.	Retaining collection certificates (Art.45(3))						¥500,000	Fine of up to ¥300,000 (Art.105,	
l specified products							Fine of up to	(IV))	
	Reporting w	hen collection certificates are not received,					Fine of up to		
	Issuing copies of collection certificates (Art.45(4))						=300,000	Fine of up to ¥300,000 (Art.105,	
							Fine of up to	(V))	
	Bearing the g	cost of fluorocarbon recovery etc. (Art 74(3)	+				+300,000		
Parties ordering specific demolition work	Cooperation	with confirming whether Class I specified in place							
	Retaining exp	planatory documents (Art.42(3))	<u> </u>						
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	Receiving in further entru	advance and retaining written consent for stment (Art.43(4))					Fine of up to ¥500,000		
entrusted with the delivery of	Providing and entrustment	d retaining copies of written confirmations of (Art.43(5)-(7))	1				Fine of up to ¥500,000		
l fluorocarbons	Retaining copies of collection certificates						Fine of up to ¥500,000		
	L					1			

		Guidance and advice Recommendations			vice	Penal provisions		
					lations	Indirect por eltier		
Obligated party	Obligation under the Fluorocarbon Emissions Control Act			Public		Art.104. (i) for	Direct penalties	
				announ	Orders	violations of orders)		
	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		
Class	Registration of recovery information, etc. with information processing centers (Art.40(1))					Fine of up to ¥500,000		
I fluorocarbon filling and	Collection of fluorocarbons (during disposal) (Art.44(1))					Fine of up to ¥500,000		
recovery operators	Compliance with recovery standards (during disposal) (Art.44(2))					Fine of up to ¥500,000		
	Issuing and sending collection certificates and issuing and retaining copies (Art.45(1),(2))					Fine of up to ¥500,000		
	Delivery of fluorocarbons (Art.46(1))					Fine of up to ¥500,000		
	Compliance with transport standards (Art.46(2)) (including persons entrusted)					Fine of up to ¥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))						First of the M200,000 (Art 104, (.))	
Persons	Providing copies of collection certificates (Art.45-2(2))					Fine of up to ¥500.000	Fine of up to ¥300,000 (Art.104, (v))	
undertaking collection, etc.	Retaining copies of collection certificates (Art.45-2(3))						Fine of up to ¥300,000 (Art.105, (vi))	
of Class I specified						¥500,000	$E_{inc.of.up.to.}$ (200,000 (Art 105, (iii))	
products	confirming that no fluorocarbons remain in them (Art.45- 2(4))					Fine of up to ¥500,000		
	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))	
Class I fluorocarbon	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))	
recycling operators and fluorocarbon destruction operators	Compliance with fluorocarbon recycling standards (Art.58(1)) (Recycling operators only)					Fine of up to ¥500,000		
	Delivery and collection of fluorocarbons (Art.58(2), Art.69(1)-(3))					Fine of up to ¥500,000		
	Compliance with transport standards (Art.58(3)) (Recycling operators only)					Fine of up to ¥500,000		
	Sending and retaining copies of recycling certificates and destruction certificates (Art.59(1), Art.70(1))					Fine of up to ¥500,000		
	Recording and reporting amounts of recycling and distraction, etc. (Art.60(1),(3), Art.71(1),(3))						Fine of up to ¥200,000 (Art.107, (i), (ii))	
	Compliance with fluorocarbon destruction standards (Art.69(4)) (Destruction operators only)					Fine of up to ¥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 product manufacturers, etc., managers of Class I specified products, Class I specified product manufacturers, persons undertaking disposal, etc. of Class I specified products, primary contractors for specific demolition work, persons entrusted with delivery of 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).
 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 products, Class I specified products, primary contractors for specified product, Class I specified product, persons undertaking disposal, etc. of Class I specified products, primary contractors for specific demolition work, persons entrusted with delivery of Class I fluorocarbon filling and recovery operators (including persons entrusted with transportation), and fluorocarbon recycling operators (including persons entrusted with transportation), and fluorocarbon filling and recovery operators (including persons entrusted with transportation), and fluorocarbon recycling operators (including persons entrusted with transportation), and fluorocarbon recycling operators, (including persons entrusted with transportation), and fluorocarbon destruction operators).
 Reaarding persons entrusted with transportation), and fluorocarbon destruction operators).
 Reearding persons entrusted with to those under Article 103, (xii), cumulative imposition is applicable for corporations (Article 108).

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

Contact information for inquiries, reports, and consultation

Zero Carbon Promotion Division, Environment Environmental Policy Division, Lake Biwa Hokkaido 011-204-5190 Shiga 077-528-3365 and Community Affairs Department Environment Department Environmental Policy Division, Environmenal Community Affairs Department Environmental Management Division, Community Affairs and Environment Department Aomori 017-734-9249 **Kyoto** 075-414-4709 Environmental Policy Division, Environmena Industrial Waste Guidance Division, Circular Economy Promotion Iwate 019-629-5359 Osaka 06-6210-9570 and Community Affairs Department Office, Environment, Forestry, and Fishery Departmen Environmental Policy Division, Environment 022-211-2661 078-362-3285 Mivagi Hvoqo Water and Air Division, Envronmental Department and Community Affairs Department Environmental Management Division, Environmenat and Community Affairs Department Environmental Policy Division, Water circulation Forest, Landscape, and the Envronment Department Akita 018-860-1603 Nara 0742-27-8734 Water and Air Environment Division, Environmental Management Division, Environmental Policy Yamagata 023-630-2339 Wakayama 073-441-2688 Environment and Energy Department Bureau, Environment and Community Affairs Department Water and Air Environment Division, Circular Economy Promotion Division, Community 024-521-7261 0857-26-7684 **Fukushima** Tottori Environment and Energy Department Affairs and Environment Department Environmental Division, Community Affairs and Environment Department Environmental Policy Division, Environment and Community Affairs Department Ibaraki 029-301-2956 Shimane 0852-22-6443 Environmental Protection Division, Environmenal Environmental Planning Division, Environment Tochigi 028-623-3188 Okavama 086-226-7299 and Forest Department and Culture Department Environmental Protection Division, Environmenal **Environmental Protection Division, Environment** 027-226-2832 082-513-2920 Gunma Hiroshima and Forest Department and Community Affairs Department Environmental Policy Division, Environment and Community Affairs Department Air Environment Division, Environmental Saitama 048-830-3058 Yamaguchi 083-933-3034 Department Waste Guidance Division, Environment Environmental Guidance Division, Management Chiba 043-223-4658 Tokushima 088-621-2267 and Community Affairs Department of Environmental Risks Environmental Protection Division, Environmntal Environmental Management Division, Environment 03-5388-3471 Tokyo Kagawa 087-832-3219 Department, Environment Bureau and Forest Department Air and Water Quality Division, Environmental Department, Environment and Agriculture Bureau Environmental Policy Division, Environment Bureau, Community Environment Department Kanagawa 045-285-0854 Ehime 089-912-2347 Environmental Policy Division, Environment Environmental Division, Forestry and Environment Niigata 025-280-5150 Kochi 088-821-4524 Bureau Department Environmental Policy Division, Community Affairs, Environment, and Culture Department Environmental Protection Division, Environmental Toyama 076-444-8727 **Fukuoka** 092-643-3360 Department Environmental Policy Division, Community Environmental Division, Community Environment Ishikawa 076-225-1463 Saga 0952-25-7774 Affairs and Environment Department Department Environmental Policy Division, Safety and Community Environment Division, Community Nagasaki Fukui 0776-20-0303 095-895-2356 Environment Department Affairs and Environment Department Environmental and Energy Policy Division, Environment and Energy Department Circular Economy Promotion Division, Environment Bureau, Yamanashi 055-223-1506 Kumamoto 096-333-2278 Environment and Community Affairs Department Circular Economy Promotion Division, Commiunity Resource Circulation Promotion Division, Nagano 026-235-7164 Oita 097-506-3126 Environmental Department Affairs and Environment Department Environment Management Division, Environment Environmental Management Division, Environment Gifu Miyazaki 058-272-8232 0985-26-7085 and Community Affairs Department and Forest Department nvironmental Policy Division, Environment Bureau, Waste and Recycling Management Division, Environment and Forestry Department Shizuoka Environmental Policy Division, Environment Department 054-221-3781 Kagoshima 099-286-2594 Water and Air Environment Division, Environmental Environmental Protection Division, Environmental Aichi 052-954-6215 Okinawa 098-866-2236 Policy Department, Environment Bureau Department Climate Change Countermeasures Division, Environment Mie 059-224-2368 and Community Affairs Department

Prefectural government offices in charge

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) https://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) https://www.meti.go.jp/policy/chemical_ management/ozone/index.html

For inquiries concerning primary contractors for specific demolition work

The list of construction business license

[URL] https://www.mlit.go.jp/totikensangyo/const/1_6_bt_000088.html

The list of the Construction Material Recycling Act and demolition business registration [URL] https://www.mlit.go.jp/sogoseisaku/region/recycle/d06link/index_0601link.htm

General inquiries on the Construction Business Act (construction business license) and the Construction Material Recycling Act (demolition business registration)

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) https://www.mlit.go.jp/totikensangyo/const/1_6_bt_000283.html

The list of Class I fluorocarbon filling and recovery operators You can obtain the list from a prefectural office of your interest.

- The list of Class I fluorocarbon recycling operators and fluorocarbon destruction operators [URL]https://www.env.go.jp/earth/ozone/cfc.html
- For more details, please visit the website of the Fluorocarbon Emissions Control Act.

https://www.env.go.jp/earth/furon/