

V Disposal of Waste

1. Classification of waste

Kanazawa University has established the 'Bylaws of Waste Disposal at Kanazawa University' (hereinafter referred to as 'the Bylaws') to suppress the discharge of waste from the university, promote waste recycling, and properly manage waste.

The Bylaws define waste as substances that are discarded or discharged in the course of performing activities at the university such as in education, research, and medical practice (excluding radioactive substances and those contaminated with radioactive substances) and specified by the Waste Management and Public Cleansing Act. We usually handle substances used in experiments, research, and medical practice as industrial waste or specially-controlled industrial waste, in principle. Those who discharge waste or who move waste are considered to be waste handlers regardless if they are faculty members or students. Regional managers shall serve as persons in charge of waste (persons who are responsible for waste) for both general waste and recyclable waste. Entities that discharge waste or their representatives shall serve as persons in charge of industrial waste. Waste handlers shall observe the items specified by the Bylaws as indicated below and the rules set forth in each region and shall properly dispose of waste.

- 1) Make efforts to recycle and recover waste to use as resources.
- 2) Recognize that waste may harm people's lives and health, and the environment.
- 3) In discharging waste, observe laws and regulations, and university standards, and follow measures taken by the persons in charge of environmental management and regional managers.
- 4) Properly sort, store, and discharge waste, and make efforts to maintain a good university environment and prevent contamination of the external environment.
- 5) Classify waste according to the tables provided from the next page onward, and discharge waste to specified storage facilities (such as trash cans and dumpsites).
- 6) Make efforts to tidy up storage facilities.
- 7) Prevent scattering, leakage, underground penetration, and release of odors when discharging waste. If there is a risk of any of the above, immediately take appropriate measures to prevent it, and make efforts to prevent accidents.
- 8) Dispose of waste containing chemical substances according to the 'Bylaws of Chemical Substance Management at Kanazawa University.'
- 9) Set forth those who discharge industrial waste and their contents.
- 10) Waste to be disposed of by the university includes only that which is generated by activities at the university. Never carry in waste from outside the university.
- 11) If you uncover a waste-related accident, take necessary measures and report the accident and its details to the regional manager or the like without delay.

'Guideline for classification and how to throw out trash (for undergraduates)' (in Japanese and English) and 'Guideline for classification of waste (for faculty members and graduate students)' (in Japanese and English) can be viewed on the university's website

(<http://www.kanazawa-u.ac.jp/university/corporation/kankyuu>).

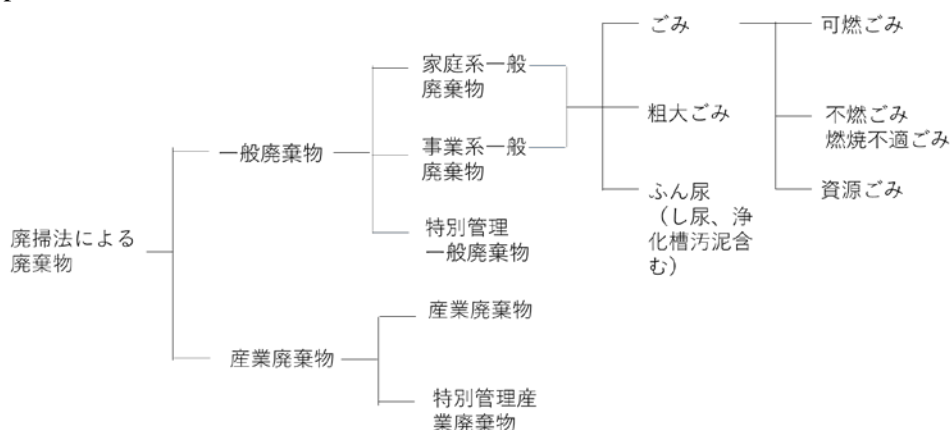
2. Disposal of industrial waste

1) Applicable laws and regulations

Disposal of industrial waste is set forth by the Waste Management and Public Cleansing Act (Law No. 137 of 1970) and its related ordinances. The act is amended almost every year.

2) Definition and classification of waste

According to the act, waste is defined as solid or liquid matter generated by persons who discharge it and which has no use since it cannot be sold to others for value. The chart below shows an example of waste classification.



(1) Specially-controlled general waste

Among general waste items, those which may be explosive, toxic, or infectious and that have properties that may harm people's health or the living environment

Those listed in the table below are specified under this category.

Type of specially-controlled general waste	Remarks	Specific examples, etc. (mainly in the university)
Parts using PCBs	Parts using PCBs incorporated in waste air conditioners, waste TV receivers, and waste microwave ovens	
Waste mercury	Waste mercury collected from general waste pertaining to products that use mercury	
Soot and dust	Soot and dust collected by dust collecting facilities at general garbage incineration facilities (with a processing capacity of 5 tons/day or more) and not classified as industrial waste	
Soot and dust, burnt residue, and sludge	Waste collected from waste incinerators that are specified facilities under the Act on Special Measures concerning Countermeasures against Dioxins, and waste containing dioxins exceeding 3 ng/g	
Infectious general waste	Waste containing or bearing infectious pathogens or waste with such a possibility at hospitals, universities, and their affiliate research institutes (medical, pharmaceutical or veterinary science) and not classified as industrial waste	Absorbent cotton, gauze, etc.

(2) General waste from business activities

Waste generated from the business activities and not classified as industrial waste

(3) Industrial waste

Waste generated from the business activities listed below

Type of industrial waste	Specific examples, etc. (mainly in the university)
Burnt residue	Wood ash, waste carbon, waste activated carbon, soot, incineration ash
Sludge	Grinding sludge, metal hydroxide sludge, waste clay, waste pigments, other sludge from liquid waste treatment (such as calcium fluoride), sludge caused by biological treatment of drainage, papermaking sludge, sludge from sewage treatment plants, etc.
Waste oil	Waste oil with a flash point of 70°C or more (mainly hazardous substances of grade 4-3 or higher), machine oil, waste oil paint/ink, glycerin, triethanolamine, aniline, formamide, cresol, cooking oil, lard, etc. (excluding those classified as specially-controlled industrial waste) Crayon, solid fatty acid, solid soap, asphalt, paraffin wax, etc.
Waste acid	Waste acid at a pH of 2–7, liquid waste of sulfuric acid, chloric acid, or nitric acid and their salts, organic acid liquid waste from acetic acid or the like, waste photographic fixer, waste salt solutions from various acids, etc.
Waste alkali	Liquid waste at a pH of 7–12.5, liquid waste such as ammonia or sodium hydroxide, waste photographic developer, waste salt solutions from various alkalis, etc.
Waste plastics	Resins such as polyethylene resin and polypropylene resin (including styrene foams), synthetic fibers such as nylon/polyester fibers (including blended fabric containing less than 50% natural fibers), synthetic leather, waste solid paints, waste adhesive agents, fiber-reinforced plastics (FRPs), celluloid, waste ion-exchange resin, waste synthetic rubber, waste chemical scraps, synthetic rubber products, etc.
Waste rubber	Waste natural rubber, waste ebonite, waste latex, etc.
Waste metal	Emptied cans, waste galvanized iron or tin plate, metal waste such as waste iron or aluminum, etc.
Waste glass and ceramic ware	Light bulbs (including fluorescent lamps, etc.), glassware (window glass, bottles, glass wool, laboratory glassware, vials, thermometers, etc.), waste ceramics, brick, ceramic ware, waste concrete products, etc.
Slag	Metal slag, waste casting sand, etc.
Debris	Concrete debris, stone, brick, slate, tile, and other similar waste released due to structure removal (excluding waste wood from construction sites)
Soot and dust	Soot and dust generated from soot- and smoke-emitting facilities or industrial waste incineration facilities specified by the Air Pollution Control Act and collected by dust collecting facilities
Waste paper	Limited to industries such as construction, paper manufacturing, publication and printing industries
Waste wood	Limited to industries related to construction and lumber industries
Waste fiber (limited to natural fiber)	Limited to industries related to construction and textile industries
Animal and plant residue	Limited to industries such as food, pharmaceutical products, and perfumery industries
Unnecessary solid animal substances	Unnecessary solid substances from livestock and poultry slaughtered at abattoirs and poultry processing plants
Excreta from livestock	Limited to those related to the stock-raising industry
Livestock carcasses	Limited to those related to the stock-raising industry
Waste under Ordinance No. 13	Waste produced after treatment of any of the above-mentioned industrial waste and not classified as belonging to any of the listed industrial waste categories (such as solidified concrete, etc.)

* Separate fluorescent lamps and dry cells, and discard them using the specified methods.

Among the above waste items, refer to ‘TV Collection and Storage of Liquid Wastes’ if any can be collected by the Environment Preservation Center.

(4) Specially-controlled industrial waste

Among industrial waste items, specially-controlled industrial waste is defined as that which has explosive, toxic, and infectious potential and that which may harm people's health or the living environment, including industrial waste listed in the table below.

Specially-controlled industrial waste	Specific examples, etc.
Waste oil	Volatile oil or light oil industrial waste with a flash point of 70°C or less (mainly hazardous substances of grade 4-2 or lower), gasoline, kerosene, light oil, heavy oil, benzene, toluene, thinner, ethers, alcohols, ketones, esters and other organic solvents (Those with a flash point of 70°C or more, however, are classified as industrial waste.)
Waste acid	Waste acid with excessive corrosiveness and a pH of 2.0 or less
Waste alkali	Waste alkali with excessive corrosiveness and a pH of 12.5 or more
Infectious industrial waste	Industrial waste containing or possibly containing infectious pathogens such as blood or used injection needles discharged by medical institutions
Specified hazardous industrial waste Waste PCBs, etc.	Waste PCBs and waste oil containing PCBs
Specified hazardous industrial waste Waste contaminated by PCBs	Waste paper, waste wood, or waste fibers coated with PCBs or with absorbed PCBs, waste plastics or waste metal with adherent or sealed in PCBs, or waste ceramic ware with adherent PCBs
Specified hazardous industrial waste Waste used for PCB treatment	Substances used for treating waste PCBs or PCB-contaminated substances
Specified hazardous industrial waste Waste mercury, etc.	Waste mercury produced at specified facilities (including universities and their research institutes), etc. Industrial waste containing mercury or mercury compounds, or waste mercury collected from industrial waste pertaining to mercury-containing products
Specified hazardous industrial waste Specified sewage sludge	Sludge specified by the provision of Paragraph 4, Order for Enforcement of the Sewerage Act No. 13
Specified hazardous industrial waste Waste asbestos, etc.	Scattering sprayed-on asbestos and heat insulating materials containing asbestos, etc. removed from buildings, and plastic sheets discharged from asbestos disposal work Scattering asbestos, etc. collected by dust collecting equipment at business entities having specified dust discharging facilities designated by the Air Pollution Control Act
Specified hazardous industrial waste Burnt residue	Those not conforming to the 'Judgment criteria of industrial waste containing metals' (see the next page)
Specified hazardous industrial waste Soot and dust	Those not conforming to the 'Judgment criteria of industrial waste containing metals' (see the next page)
Specified hazardous industrial waste Waste acid/waste alkali Sludge	Waste from facilities designated by the ordinance and not conforming to the 'Judgment criteria of industrial waste containing metals' (see the next page)
Specified hazardous industrial waste Slag	Those not conforming to the 'Judgment criteria of industrial waste containing metals' (see the next page)
Specified hazardous industrial waste Waste oil	Waste solvents from trichloroethylene, tetrachloroethylene, dichloromethane, carbon tetrachloride, 1,2-dichloroethane, 1,1-dichloroethylene, cis-1,2-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,3-dichloropropene, benzene, or 1,4-dioxane (regardless of the contents)

*** Among the above waste items, refer to 'IV Collection and Storage of Liquid Wastes' if any of them can be collected by the Environment Preservation Center.**

(5) Judgment criteria for industrial waste containing metals

Name of metal	Burnt residue, slag, and soot and dust	Sludge and waste under Ordinance No. 13	Waste acid and waste alkali
	Dissolution test (mg/L)	Dissolution test (mg/L)	Content test (mg/L)
1 Alkyl mercury compounds (R-Hg)	No detection	No detection	No detection
Mercury or mercury compounds (Hg)	0.005 or less	0.005 or less	0.05 or less
2 Cadmium or cadmium compounds (Cd)	0.09 or less	0.09 or less	0.3 or less
3 Lead or lead compounds (Pb)	0.3 or less	0.3 or less	1 or less
4 Organic phosphorous compounds (O-P)	—	1 or less	1 or less
5 Hexavalent chromium compounds (Cr ⁶⁺)	1.5 or less	1.5 or less	5 or less
6 Arsenic or arsenic compounds (As)	0.3 or less	0.3 or less	1 or less
7 Cyanides (CN)	—	1 or less	1 or less
8 PCBs	—	0.003 or less	0.03 or less
9 Trichloroethylene (TCE)	—	0.1 or less	1 or less
10 Tetrachloroethylene (PCE)	—	0.1 or less	1 or less
11 Dichloromethane	—	0.2 or less	2 or less
12 Carbon tetrachloride (CCl ₄)	—	0.02 or less	0.2 or less
13 1,2- dichloroethane	—	0.04 or less	0.4 or less
14 1,1- dichloroethylene	—	1 or less	10 or less
15 cis-1,2- dichloroethylene	—	0.4 or less	4 or less
16 1,1,1- trichloroethane	—	3.0 or less	30 or less
17 1,1,2- trichloroethane	—	0.06 or less	0.6 or less
18 1,3-dichloropropene (D-D)	—	0.02 or less	0.2 or less
19 Thiuram	—	0.06 or less	0.6 or less
20 Simazine (CAT)	—	0.03 or less	0.3 or less
21 Thiobencarb (Benthiocarb)	—	0.2 or less	2 or less
22 Benzene (C ₆ H ₆)	—	0.1 or less	1 or less
23 Selenium or selenium compounds (Se)	0.3 or less	0.3 or less	1 or less
24 1,4- dioxane	0.5 or less	0.5 or less	5 or less
25 Dioxins	3 ngTEQ/g or less	100 pgTEQ/L or less	—

3) Responsibilities of business entities for disposal

Applicable laws specify the responsibilities as described below:

Business entities shall properly dispose of waste produced in relation to their business activities under their own responsibility. The term 'own responsibility' means that business entities shall take responsibility for the waste until they are properly disposed of at final disposal.

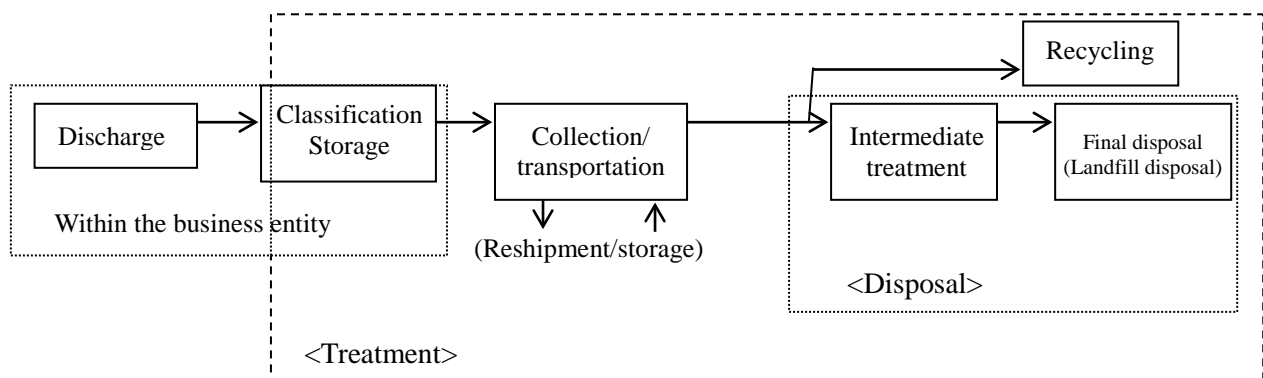
Business entities shall be dedicated to reducing the quantity of waste produced in relation to their business activities by utilizing recycling or other measures. Business entities shall cooperate with the policies of local public bodies in terms of reduction or other appropriate treatment of waste.

(1) Responsibilities of business entities in discharging waste

- ① Business entities shall dispose of industrial waste by themselves.
- ② Business entities producing specially-controlled industrial waste shall appoint a

specially-controlled industrial waste manager who holds the qualifications specified by the ordinance of the Ministry of the Environment.

- ③ When business entities dispose of waste by themselves,
 - A) They shall observe the disposal standards;
 - B) They shall observe the storage standards until industrial waste is removed; and
 - C) They shall submit a notification if they store industrial waste outside their premises.
- ④ When business entities outsource the disposal of industrial waste,
 - A) They shall observe the outsourcing standards;
 - B) They shall outsource disposal to contractors whose scope of business includes the disposal of industrial waste;
 - C) They shall enter into direct contract agreements with collecting and transporting contractors and disposal waste contractors;
 - D) They shall enter into contract agreements in writing;
 - E) They shall store the outsourcing contract agreements (for five years after termination of the contract agreement); and
 - F) They shall notify information related to industrial waste in writing before commencing with outsourcing of the disposal of specially-controlled industrial waste.
- ⑤ When outsourcing disposal, business entities shall issue a manifest for industrial waste.
 - A) Issue and check the manifest for industrial waste (electronic or paper).
 - B) Monitor the progress of proper disposal in the course until the final disposal of the waste.
 - C) If the manifest used is in paper form, archive it (for five years) and issue an annual report on the issuance of the manifest.
- ⑥ Business entities shall be dedicated to monitoring the actual disposal of waste by contractors and taking action to ensure proper disposal.
- ⑦ Business entities that discharge vast quantities of waste
 - A) Business entities that discharge 1,000 tons or more of industrial waste, or 50 tons or more of specially-controlled industrial waste (Business entities that discharge vast quantities of waste) shall submit disposal plans and reports on the actual disposal in specified forms to the prefectural governors of their places of business.
- ⑧ Business entities shall ensure the proper disposal of waste products or containers (They shall ensure proper disposal when substances manufactured or used for experiments must be disposed of as waste and shall instruct employees or students to do so as well.)
- ⑨ Business entities shall notify and educate employees (or faculty members and students) about the proper disposal of industrial waste.



- ✧ Try to reduce the quantity of waste by utilizing recycling processes.
- ✧ Ensure proper disposal when substances manufactured or used for experiments must be disposed of as waste.
- ✧ When treating or disposing of specially-controlled industrial waste, report it to the specially-controlled industrial waste manager of each section, and follow his/her instructions.
- ✧ When treating or disposing of industrial waste other than that scheduled for periodic collection, consult with the office clerk in charge, and follow his/her instructions.

(2) Storage standards

① Storage standards for industrial waste

Storage standards for industrial waste before transportation

- A) Enclosures shall be installed around the storage site.
- B) Signs satisfying the requirements below shall be posted at easy-to-recognize sites.
 - a) The width and length of the sign shall be 60 cm or more.
 - b) The sign shall include the information listed below:
 - i) The fact that it is a storage site for industrial waste;
 - ii) Type of industrial waste stored
 - iii) Name of the manager in charge of the storage site, storage site name, and contact information
 - iv) Maximum storage height if industrial waste is stored outdoors without the use of containers
- C) Take measures to prevent industrial waste from scattering, leaking, or penetrating into the ground from the storage site and from generating odors.
- D) If polluted water could be generated from the stored industrial waste, provide drain ditches or other facilities necessary for preventing contamination of public water bodies and underground water, and cover the bottom of the storage site with impermeable materials.
- E) Prevent mice and rats, and harmful insects such as mosquitos and flies from entering the storage site.
- F) Prevent piled waste from exceeding the specified height limit when storing it outdoors without the use of containers.
- G) Take special measures for industrial waste containing asbestos as described below:
 - a) Take necessary measures such as installing partitions to isolate industrial waste containing asbestos from other waste at the storage site.
 - b) Install a cover for packed industrial waste containing asbestos as a measure to prevent it from scattering.

② Specially-controlled industrial waste

Take the measures listed below depending on the type of waste involved.

- A) to G) Same as the industrial waste storage standards
- H) Take necessary measures such as installing partitions to isolate specially-controlled industrial waste from other waste at the storage site.
- I) Take special measures for specially-controlled industrial waste according to their type as described below:
 - a) For waste oils, PCB-contaminated substances, or substances used for PCB treatment, take necessary measures for preventing volatilization and exposure to high temperatures. (E.g. place in containers and seal them.)
 - b) For waste acid or waste alkali, take necessary measures for preventing corrosion. (E.g. place in containers and seal them.)
 - c) For PCB-contaminated substances or substances used for PCB treatment, take necessary measures for preventing corrosion.
 - d) For waste asbestos, take necessary measures for preventing it from scattering. (E.g., pack them.)
 - e) For waste that may corrode, take necessary measures for for preventing corrosion. (E.g., place in containers and seal them.)

(3) Outsourcing standards

① Outsourcing standards

- A) Contractors to which you will outsource treatment/disposal shall be licensed for waste disposal.
- B) Contractors to which you will outsource treatment/disposal shall include disposal of industrial waste in their scope of business.
- C) The outsourcing contract shall be entered into in writing.
- D) When outsourcing treatment/disposal of specially-controlled industrial waste, notify the contractor of the type, quantity, properties, packaging, and handling precautions of the specially-controlled industrial waste.

- E) Archive the written contract agreement and documents attached to it for five years from the date of contract termination.
 - F) For outsourcing collection and transportation, enter into separate contract agreements with a contractor licensed for collection and transportation of waste and another contractor licensed for intermediate (including recycling) or final disposal of waste.
- ② Outsourcing procedure
- A) Before outsourcing
 - a) Confirm the licenses of the industrial waste collectors and transporters and the industrial waste disposal operator.
Receive copies of the industrial waste collectors and transporters and the industrial waste disposal operator to be outsourced, check the items listed below, and determine whether waste to be outsourced for treatment (including transportation, disposal, and recycling; the same applies to the following descriptions) can be properly treated by the contractors.
 - i) Classification of treatment and types of waste (whether contractors can handle waste to be outsourced);
 - ii) Type and processing capacity of the treatment facilities; and
 - iii) Condition and period of licensing
 Select appropriate contractors for waste properties to be discharged and the contractor's treatment methods.
 - b) For hazardous waste, check by analyzing hazardous components in advance.
 - c) For industrial waste, hazardous substances shall be analyzed in advance (particularly for waste oils, waste acid, waste alkali, sludge, and burnt residue). (If waste plastic, waste rubber, waste metal, waste glass, or waste ceramic ware come into contact or may come into contact with hazardous substances, they shall be neutralized.)
 - d) Visit the disposal sites to conduct an on-site inspection as required (to confirm processing and landfill capacity of the final disposal sites).
 - e) Enter into the outsourcing contract agreements in writing (with the industrial waste disposal operator and the industrial waste collector and transporter).
The outsourcing contract shall be entered into in writing and include the provisions listed below:
 - i) Common descriptions
 - (a) Type and quantity of industrial waste
 - (b) Effective period of the outsourcing contract
 - (c) Charges to be paid by the contract giver to the contract receiver
 - (d) Range of business permitted for the contract receiver
 - (e) Information concerning the matters listed below that is necessary for the proper treatment of industrial waste outsourced by the contract giver
 - i) Matters related to the properties and packaging of industrial waste
 - ii) Matters related to property changes pertaining to the industrial waste such as corrosion or volatilization under ordinary storage conditions
 - iii) Matters related to problems caused by mixture with other waste
 - iv) Matters related to the display of content labels if industrial waste is included in the categories described below and provided with content labels specified by the Japan Industrial Standard C0950
(Applicable products: Waste personal computers, waste air-conditioner units, waste TV receivers, waste microwave ovens, waste clothes drying machines, waste refrigerators, waste washing machines, etc.
Applicable hazardous substances: Lead or lead compounds, cadmium and cadmium compounds, hexavalent chromium or hexavalent chromium compounds, PCBs, polybrominated diphenyl ether)
 - v) Matters related to industrial waste containing asbestos, if any
 - vi) Other matters to be noted in handling industrial waste
 - f) Matters related to the communication method if information concerning industrial waste is changed during the effective period of the outsourcing contract
 - g) Matters related to the report of the contract receiver to the contract giver on the completion of outsourcing activities
 - h) Matters related to the handling of untreated waste at the time of termination of the

outsourcing contract

- i) Descriptions of the transportation outsourcing contract agreement
 - (a) Address of the final transportation destination
 - (b) Address of reshipment or storage site, types of industrial waste that can be stored at the site, the maximum storage capacity for reshipment if the contract receiver reships or stores the industrial waste
 - (c) For stable industrial waste, matters related to the prohibition of mix-ups with other waste at the reshipment or storage site
- ii) Descriptions of the disposal outsourcing contract agreement
 - (a) Address of the site of disposal or recycling, disposal or recycling method, and the facility's processing capacity when disposal or recycling of industrial waste is outsourced
 - (b) Site of final disposal of industrial waste after intermediate treatment, final disposal method, and the processing capacity of the facility in charge of the final disposal
 - (c) When outsourcing treatment of specially-controlled industrial waste, the contract giver shall notify the contract receiver of the type, quantity, properties, packaging, and handling precautions of the specially-controlled industrial waste in writing in advance.

B) In outsourcing

- a) Confirm the collector/transporter and their transportation vehicles, and reconfirm the waste.
- b) The contract giver shall enter necessary items on the manifest for industrial waste except for the contract receiver's signature and final signature fields. (Make sure to enter the name of the collector/transporter, disposal contractor, and classification of industrial waste. The weight may be measured by the disposal contractor that possesses measurement certification.) Issue the manifest to the collector/transporter.

C) After outsourcing

- a) Confirm the disposal.
 - i) Receive the manifest from the disposal contractor and check whether the waste was disposed of as specified in the contract agreement.
If you do not receive a manifest within 60 days (for specially-controlled industrial waste) or 90 days (for industrial waste) after the manifest issuance date, report the delay to the mayor of Kanazawa City (or the Governor of Ishikawa Prefecture in regions other than Kanazawa City) by using the specified form.
An on-site inspection is conducted as required.
 - ii) Confirm with the manifest that the final disposal of outsourced industrial waste after intermediate treatment was completed.
If you do not receive a manifest within 180 days after its issuance date, investigate the transportation and disposal of the outsourced industrial waste and take appropriate measures.

Note: If the industrial waste was disposed of in ways that are nonconforming to the treatment of such waste and problems pertaining to preservation of the living environment occurred or may occur, an administrative order will apply to the waste-disposing entity as described below:

- Waste-disposing entity that outsourced matters against the outsourcing standards;
- Waste-disposing entity that violated obligations set forth in the manifest in the course of treatment of the industrial waste such as violation of the manifest issuance obligation; or
- Waste-disposing entity that did not directly violate the above-mentioned matters but for which it is determined that taking necessary measures to solve problems under their own responsibility is appropriate, such as when it is difficult for the actual disposal contractor to take measures to solve problems and the waste-disposing entity does not pay proper compensation for disposal of the industrial waste.

b) Records retention

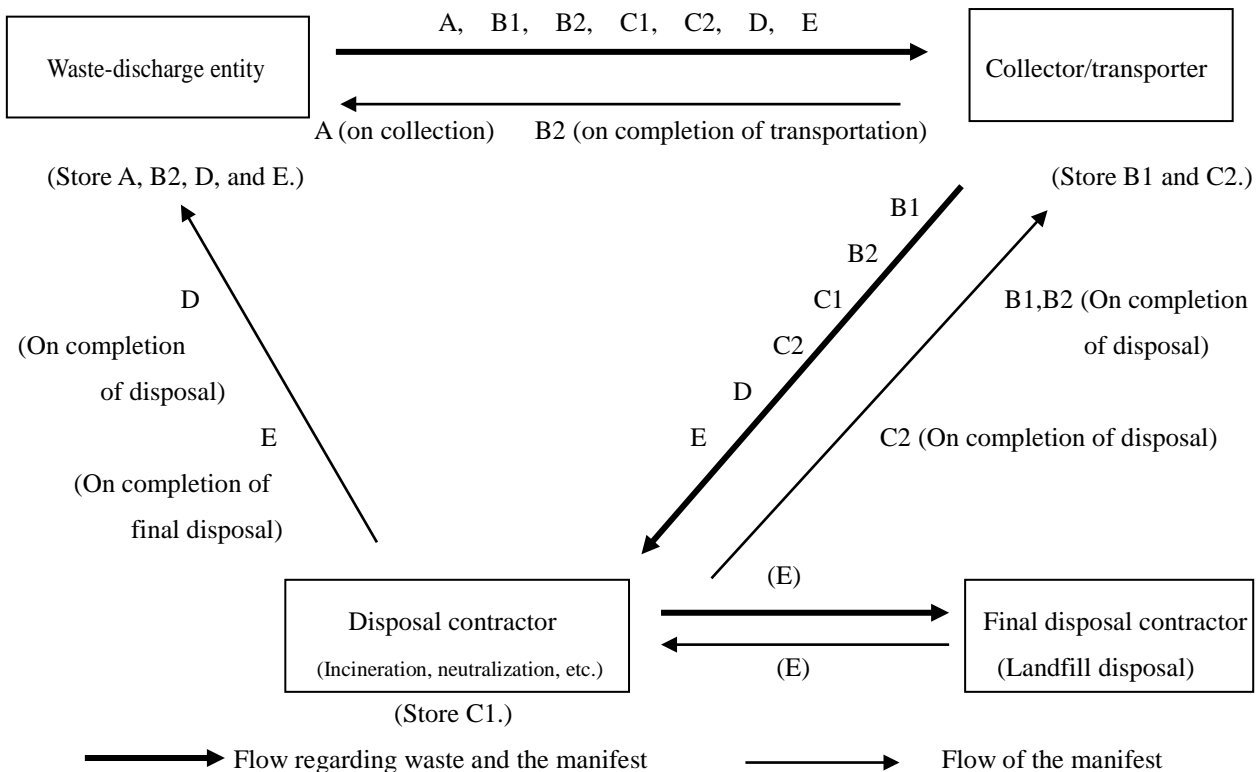
- 7) Record and archive disposal results so that they can readily be referred to at a later date.
- 4) Store outsourcing contract agreements and manifests for five years.
- 7) Submit status reports including the issuance of manifests for a year (from April to the following March) to the mayor (or governor). Kanazawa University usually submits a report covering the entire university to the mayor by the end of June

every year.

4) Manifest for industrial waste

The manifest system was established to clarify the responsibilities of waste-disposing entities in the outsourcing of industrial waste and to prevent illegal dumping. Industrial waste shall be properly disposed of under the responsibility of waste-disposing entities. If disposal is outsourced to a third party, the waste-disposing entities shall issue a manifest (manifest for industrial waste) containing the name of the industrial waste, the name of the transporter or disposer, and handling precautions, and attach it to the industrial waste. The manifest thus conveys accurate information about the industrial waste. When the manifest is returned, the waste-disposing entities shall confirm that the outsourced industrial waste was properly disposed of. Electronic and paper versions can be used for the manifest.

Flow regarding the paper manifest (7 copies of Forms A, B1, B2, C1, C2, D, and E)



5) Specially-controlled industrial waste manager

- (1) Business entities with workplaces that generate specially-controlled industrial waste shall appoint a specially-controlled industrial waste manager for each workplace so that work related to the treatment of specially-controlled industrial waste can be properly handled.
- (2) The specially-controlled industrial waste manager shall possess legally-specified qualifications.
- (3) When a specially-controlled industrial waste manager is appointed or changed, a report shall be submitted to the mayor (or governor) within 30 days (by using the specified form).
- (4) The duties of the specially-controlled industrial waste manager are to execute work related to entire scope of management of specially-controlled industrial waste according to the Waste Management and Public Cleansing Act.
 - ① Understand the discharge of specially-controlled industrial waste.
 - ② Form treatment plans.
 - ③ Ensure proper treatment (by checking storage conditions, selecting proper contractors, properly outsourcing treatment to contractors, and issuance and archiving of manifests).

- 6) Industrial waste treatment plans of business entities discharging vast quantities of waste
 Business entities with workplaces that discharge vast quantities of waste (1,000 tons or more of industrial waste, or 50 tons or more of specially-controlled industrial waste) are obliged to form a plan for treatment including the reduction of industrial waste for each workplace, submit the the plan to the mayor (or the governor) by June 30, and report the disposal results by June 30 of the next fiscal year.
 The contents of the disposal plan [planned period, management system, suppression of discharge, classification of waste, recycling, matters related to treatment, and measures to be taken for proper treatment (for specially-controlled industrial waste)]
- 7) Penalties (if any)
- (1) A maximum of five years imprisonment or a maximum fine of 10 million JPY, or both
 - ① Violation of the prevention of waste dumping (including general waste; the same applies to the descriptions below) (including attempted) (No. 14, Article 25 of the Act)
 - ② Violation of the prohibition of incineration of waste (including attempted) (No. 15 of the same)
 - ③ Unconfirmed exports (including attempted) (No. 12 of the same)
 - ④ Violation of outsourcing standards (No. 6 of the same)
 - ⑤ Violation of prohibition of the storage and treatment of specified hazardous waste (No. 16 of the same)
 - (2) Maximum of three years imprisonment or a maximum fine of 3 million JPY, or both
 - ① Violation of outsourcing standards or violation of the prohibition of re-outsourcing (No.1, Article 26 of the Act)
 - ② Violation of an order of facility improvement, violation of an order of termination of use, or violation of an order of improvement (No.2 of the same)
 - ③ Collection and transportation for the purpose of illegal dumping or illegal incineration (No. 6 of the same)
 - (3) Maximum of six months imprisonment or a maximum fine of 500 thousand JPY, or both
 - ① Violation of manifest issuance obligations, violation of description obligations, or issuance of misstatements (No. 3, Article 29 of the Act)
 - ② Violation of the storage obligation of copies of the manifest (No. 7 of the same)
 - ③ Issuance of a misstated manifest (No. 8 of the same)
 - ④ Transfer of industrial waste without transmitting a manifest (No. 9 of the same)
 - ⑤ Transmission or reporting of a misstated manifest (No. 10 of the same)
 - ⑥ Violation of the obligation to notify difficulties in industrial waste treatment or false reporting (No. 14 of the same)
 - (4) Maximum of 300 thousand JPY fine
 - ① Violation of the obligation to appoint a disposal manager or a person in charge of management (including the specially-controlled industrial waste manager) (No. 5, Article 30 of the Act)
 - ② Refusal of reporting or false reporting (No.6 of the same)
 - (5) Dual liability for corporations (Article 32 of the Act)
 - ① If an employee commits a violation subject to a professional penalty, the penalty is not only imposed on the employee but a fine is also imposed on the company. For unconfirmed exports, illegal dumping of waste, and illegal incineration, a fine of 300 million JPY will be imposed.
 - (6) Maximum of 200 thousand JPY administrative penalty
 - ① Violation of the obligation to submit a waste reduction plan by a business entity discharging a vast amount of waste, misstatements, or false reporting (Nos. 2 and 3, Article 33 of the Act)

The above-mentioned penalties are an example.

For details, refer to the Waste Management and Public Cleansing Act

☆ Example of illegal dumping (excerpt from the Kanazawa City brochure)

Casually discarding trash on the road, in a park, or places other than those specified
Littering an empty can or cigarette

8) Other laws and regulations related to waste

Other laws and regulations related to waste are enacted as listed below according to the Basic Act on Establishing a Sound Material-Cycle Society (on June 2, 2000). For details, refer to the respective laws.

Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging (1995), Act on Recycling of Home Appliances (1998), Act on the Promotion of Effective Utilization of Resources (enforced in April 2001), Construction Material Recycling Act (enforced in November 2000), Law for Promotion of Recycling and Related Activities for Treatment of Cyclical Food Resources (enforced in May 2001), Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities (enforced in April 2001), Act on Recycling, etc. of End-of-Life Vehicles (enforced in January 2005), Act on Promotion of Recycling of Small Waste Electrical and Electronic Equipment (enforced in April 2013)