Ministry of Transport Ordinance No. 33 of 1952

Regulations for Transporting Radioisotopes

In accordance with the provisions of Article 59 of the Act on the Regulation of Nuclear Source Materials, Nuclear Fuel Materials and Nuclear Reactors (Act No. 166 of Showa 32) and Article 18 of the Act on the Prevention of Radiation Hazards Caused by Radioactive Isotopes, etc. (Act No. 167 of Showa 32), a ministerial ordinance to amend all of the Regulations for the Transportation of Radioactive Materials (Ordinance No. 16 of the Ministry of Transport of Showa 33) is established as follows.

(Purpose)

Article 1 When radioactive isotopes, etc. are transported outside the factory or place of business by railway, track, cableway, trackless train, automobile or light vehicle, the provisions of this Ministerial Ordinance shall apply.

(Definition)

Article 2 The terms used in this Ministerial Ordinance are those of the Act on the Regulation of Radioactive Isotopes, etc. (Act No. 167 of Showa 32. Hereinafter referred to as the "Law". According to the example of the terminology used in the

2. In this Ministerial Ordinance, the following terms shall have the meanings set forth in their respective items.

(i) Nuclear Fuel Transports: Regulations on the Transportation of Nuclear Fuel Materials Outside Factories or Establishments (Prime Minister's Office Ordinance No. 57 of 1953; Hereinafter referred to as the "Outside Transportation Regulations". Nuclear fuel transport specified in Article 1, Item 3.

2. Enforcement Regulations of the Act on the Control of Radioactive Isotopes, etc. (Prime Minister's Office Ordinance No. 56 of Showa 35. Hereinafter referred to as the "Implementing Regulations". Radioactive transports specified in Article 18-3, Paragraph 1 (including IP-1, IP-2, and IP-3 as defined in Paragraph 2 of the same Article) Refers to the following.

(3) Overpack means that the nuclear fuel transport or radioactive transport is delivered by the shipper in a box or bag, etc. (excluding a transport device made for transporting the material itself during transportation without the need for transshipment itself, which has a structure and strength that can withstand repeated use, and has a device for loading and unloading by machinery or a device for fixing it to a vehicle). It refers to items that are stored or packaged in.

(iv) "Rolling stock" means a railway, track or trackless train vehicle, cableway carrier, motor vehicle or light vehicle.

(5) "Container" means a transport device made for transporting goods to be transported during transportation without the need for transshipment itself, having a structure and strength that can withstand repeated use, and having a device for loading and unloading by a machine or a

device for fixing to a vehicle.
(6) "Tank" means a tank used as a transport device.
(vii) "Radioactive Transport" means a radioactive transport, an overpack in which a radioactive transport is stored or packaged, or a container in which a radioactive transport is stored.
(viii) Dedicated loading Large container (refers to a container with an internal volume exceeding 3.0 cubic meters) The same shall apply hereinafter. or a method of loading in which the vehicle is dedicated to a shipper and the loading, unloading, and handling of the goods to be transported is carried out at the direction of the shipper or consignee.

(Handling location)

Article 3 Radioactive Transports, etc. (L-type Transports as defined in Article 18-3, Paragraph 1, Item 1 of the Enforcement Regulations (hereinafter referred to as "L-type Transports") Overpacks in which only L-type transports are stored or packaged, and containers in which only L-type transports are stored (hereinafter referred to as "L-type transports, etc."). Excludes. The same applies to Articles 8 and Articles 11 to 15. shall not be loaded, unloaded, or otherwise handled in a place normally accessible to persons other than those concerned. However, this does not apply if measures such as territorial construction and installation of signs are taken.

(Loading method, etc.)

Article 4 The loading or unloading of radioactive transports shall be carried out in such a way as not to impair the safety of radioactive transports.

2. Radioactive transports must be loaded in such a way that the safety of radioactive transported materials is not impaired due to movement, falling, falling, etc., during transportation.

3. Radioactive transported materials shall not be loaded in a place normally accessible to persons other than those concerned.

(Consolidation limitation)

Article 5 Radioactive transports, etc., with an average heat release rate of more than 15 watts per square meter from the surface, shall not be mixed with other cargo unless special measures are taken, such as the installation of a device to remove heat.

2. Radioactive transports shall not be mixed in the same vehicle as the following:
(i) Explosives as defined in Article 2, Paragraph 1 of the Explosives Control Act (Act No. 149 of Showa 25) and smoke and fire as stipulated in Paragraph 2 of the same Article.
(ii) High-pressure gas stipulated in Article 2 of the High Pressure Gas Safety Act (Act No. 204 of Showa 26) (excluding those enclosed in fire extinguishers))

(iii) Volatile oils, alcohols, carbon disulfide, and other flammable liquids with a flash point of 50 degrees Celsius or less (85 degrees Celsius in the case of dedicated loading) or less.

(4) Hydrochloric acid, sulfuric acid, nitric acid or other strong acids with an acid content exceeding 10% by volume percentage.

(5) In addition to those listed in the preceding items, substances that may impair the safe transportation of radioactive transported materials

(Dose equivalent rate for containers or overpacks, etc.)

Article 6 Dose equivalent rate of containers containing radioactive transport or overpacks containing radioactive transport (dose equivalent rate determined by the Nuclear Regulation Authority pursuant to Article 4, Item 7 of the Regulations on Outer Transportation) The same shall apply hereinafter. shall not exceed the values specified in each of the following places.

(i) The maximum value of the surface dose equivalent rate (hereinafter referred to as the "maximum dose equivalent rate"). 2 millisieverts per hour

(ii) At a distance of one meter from the surface, the maximum dose equivalent rate is 100 microsieverts per hour.

2. The radiosurface density of radioisotopes on the surface of the container in which the radioactive transport is stored or the overpack in which the radioactive transport is stored or packaged shall be determined by the density specified in the notification (hereinafter referred to as the "surface density limit"). It must not be exceeded.

(Transportation Index and Critical Safety Index)

Article 7 Transported Goods (Nuclear Fuel Transports and Radioactive Transports) The same shall apply hereinafter in this Article, Article 9, Paragraphs 2 and 3, and Article 17, Paragraphs 5, 11 and 16.), overpacks and containers in which transported goods are stored (excluding containers containing contaminants specified in Paragraph 4 of the same Article). Fissile transport (hereinafter referred to as "fissile transport") specified in Article 11 of the Outer Transportation Regulations. For overpacks in which fissile transports are stored or packaged, and for containers in which fissile transports are stored, a critical safety index shall be determined. provided, however, that L-type transports (including L-type transports stipulated in Article 3, Paragraph 1, Item 1 of the Outer Transportation Regulations) The same shall apply hereinafter in this section. This does not apply to overpacks in which only L-type transports are stored or packaged, and containers in which only L-type transports are stored.

2. The transport index referred to in the preceding paragraph shall be a numerical value determined in accordance with the provisions of each of the following items.

(i) In the case of transported goods, the value obtained by multiplying

the maximum dose equivalent rate at a distance of one meter from the surface of the transported object in millisieverts per hour by one hundred. provided, however, that in the case of goods for which a container or tank is used as a container, the value obtained by multiplying the value by the coefficients listed in the lower column of the following table according to the classification of the largest cross-sectional area of the container or tank listed in the upper column of the following table.

If it is less than 1 square meter	one
More than 1 square meter and less than 5 square meters	two
More than 5 square meters and less than 20 square meters	three
If it exceeds 20 square meters	ten

(ii) In the case of an overpack, the value obtained by summing the values set forth in the preceding item for the transported goods stored or packaged in the overpack. However, in the case of an overpack having a structure in which the outer shape is not easily deformed, the value obtained by multiplying the maximum dose equivalent rate at a distance of one meter from the surface of the overpack in millisieverts per hour by one hundred according to the classification of the maximum cross-sectional area of the overpack listed in the upper column of the table in the preceding item.

(3) In the case of a container in which the transported goods are stored, the value obtained by summing the values in the preceding two items for the transported goods and overpacks stored in the container, or the value obtained by multiplying the maximum dose equivalent rate at a distance of one meter from the surface of the container in millisieverts per hour by one hundred, according to the classification of the maximum cross-sectional area of the container listed in the upper column of the table in subparagraph (1), respectively: The value obtained by multiplying by the coefficients listed in the lower column of the same table

3. In the case of determining the transport index pursuant to the provisions of the preceding paragraph, if the value used for such determination is 0.05 or less, the value may be set to 0 as stipulated in the notification.

4. The critical safety index referred to in paragraph (1) shall be a numerical value determined in accordance with the following items: In this case, if the number of transportation restrictions used in the determination is unlimited, the value can be set to 0.

(i) In the case of fissile transports, the number of fissile transports shall be limited to the number of units transported (whichever is the lesser of the number of transport restrictions specified in Article 11,

Item 2, Item (d) or (e) of the Regulations on Foreign Transport). The value obtained by dividing by 50

(ii) In the case of an overpack, the value obtained by summing the values set forth in the preceding item for the fissile transport stored in or packaged in the overpack.

(iii) In the case of a container in which a fissile transport is stored, the value obtained by summing the values set forth in the preceding item for the fissile transport and the overpack stored in the container.

(Signs or Indications)

Article 8 Each of the radioactive transports listed in the upper column of the following table shall be marked with the signs specified in the notification in the places listed in the lower column of the same table.

(i) Radioactive goods (excluding containers or tanks used as containers); The same applies to the next and third items. or an overpack containing or packaged radioactive transport, with a maximum dose equivalent rate of 5 microsieverts per hour or less at the surface and a transport index of 0.	Two locations on the surface of the radioactive transport or the overpack in which the radioactive transport is stored or packaged.
(ii) Radioactive transports or overpacks in which radioactive transports are stored or packaged (excluding those listed in the preceding item). The maximum dose equivalent rate at the surface is not more than 500 microsieverts per hour, and the transport index does not exceed 1	Two locations on the surface of the radioactive transport or the overpack in which the radioactive transport is stored or packaged.
(iii) Radioactive transports other than the radioactive transports listed in the preceding two items or overpacks in which the radioactive transports are stored or packaged, or overpacks in which the radioactive transports are stored or packaged.	Two locations on the surface of the radioactive transport or the overpack in which the radioactive transport is stored or packaged.
(iv) Containers or tanks used as containers for radioactive transport (excluding containers or tanks used as containers in the case prescribed in Article 17, Paragraph 1); The same	Four points on the four sides of the container or on the surface of the tank

shall apply hereinafter to items 6. or containers containing radioactive transport, where the maximum dose equivalent rate at the surface is 5 microsieverts per hour or less and the transport index is 0.	
(v) Containers or tanks used as containers for radioactive transports or containers in which radioactive transports are stored (excluding those listed in the preceding item). The maximum dose equivalent rate at the surface is not more than 500 microsieverts per hour, and the transport index does not exceed 1	Four points on the four sides of the container or on the surface of the tank
(6) Containers or tanks other than those listed in the preceding two items	Four points on the four sides of the container or on the surface of the tank

(2) The following radioactive transports shall clearly display the matters specified in each of the following items in a durable manner in an easily visible place on the surface.

(i) the name and address of the shipper or consignee of all radioactive transports and the UN number specified in the notification relating to the radioisotope;

(ii) Radioactive transports (excluding L-type transports) The name of the product specified in the notification of the radioisotope, etc.

(iii) Radioactive transport with a gross weight of more than 50 kilograms: Gross weight

(iv) Type A transported goods specified in Article 18-3, Paragraph 1, Item 2 of the Enforcement Regulations: "Type A" or "TYPE A" characters

(5) BM-type transports stipulated in Article 18-3, Paragraph 1, Item 3 of the Enforcement Regulations (hereinafter referred to as "BM-type transports"). "BM type" or "TYPE B (M)" characters

(6) BU-type transports (hereinafter referred to as "BU-type transports") as stipulated in Article 18-3, Paragraph 1, Item 3 of the Enforcement Regulations. "BU type" characters or "TYPE B (U)" characters

(vii) IP-1 type transport goods specified in Article 18-3, Paragraph 2 of the Enforcement Regulations:"IP-1 type" or "TYPE IP-1" characters

(8) IP-2 type transport goods specified in Article 18-3, Paragraph 2 of the Enforcement Regulations: "IP-2 type" or "TYPE IP-2" characters

(9) IP-3 type transport goods specified in Article 18-3, Paragraph 2 of the

Enforcement Regulations:"IP-3 type" or "TYPE IP-3" characters

10. From item 4 to the previous item (excluding item 7) Identification symbol specified in the notification of the transport container

3. The following overpacks shall clearly display the matters specified in each of the above items in a durable manner in an easily visible place on the surface.

(i) an overpack containing or packaging radioactive transport, the word "overpack" or the word "OVERPACK"

(ii) Overpacks in which radioactive transports are stored or packaged (except in cases where the matters set forth in items 1 and 2 of the preceding paragraph displayed on each radioactive transport can be easily confirmed from the outside); The name and address of the shipper or consignee, and the UN number specified in the notification relating to the radioisotope, etc.

(3) Radioactive transports (excluding L-type transports) (except in cases where the matters set forth in items 1 and 2 of the preceding paragraph displayed on each radioactive transport can be easily confirmed from the outside). The name of the product specified in the notification of the radioisotope, etc.

4. BM and BU transports shall clearly display on the outermost surface of the container or packaging of the radioactive transport that are fire- and water-resistant, as specified in the notification, and which are fire- and water-resistant.

5 Radioactive transports (excluding L-type transports) Large containers or tanks used as containers or large containers containing radioactive transports (excluding those in which only L-type transports are stored). Same as in paragraph 6. Container signs specified in the notification shall be affixed to the four sides of the large container or to the four places on the surface of the tank.

6. In lieu of the container signs referred to in the preceding paragraph, the signs referred to in Item 4, Item 5 or Item 6 of the Table in Paragraph 1 or Article 18, Paragraph 4 may be enlarged to the dimensions of the container sign. In this case, notwithstanding the provisions of paragraph (1) or paragraph (4) of Article 18, it is not necessary to attach the sign referred to in item (4), item (5) or item (6) of the table in paragraph (1) or paragraph (4) of Article 18.

7. A large container containing radioactive transport, and a radioactive isotope or radioactive contaminant (hereinafter referred to as "radioactive isotope, etc.") with the product name specified in the notification. Of these, those with the same product name (hereinafter referred to as "the same radioactive isotope, etc."). (excluding those transported only within Japan). In the case of transporting the radioisotope, etc., the UN number of the radioisotope, etc., shall be displayed on the large container in accordance with the provisions of the

notification.

(Loading limit)

Article 9 Overpacks containing or packaging radioactive transports with a transport index exceeding 10 or a critical safety index exceeding 50 shall not be loaded. However, this does not apply when transporting with a dedicated load.

(2) Containers containing radioactive goods with a transport index or critical safety index exceeding 50 shall not be loaded. However, dedicated loading (limited to dedicated loading of the vehicle) The same applies to the following paragraph and to Article 17, paragraphs 11 and 13. This does not apply if it meets any of the following standards.

(i) Fissile transports are not stored.

(ii) In the case where fissile transports are stored, the sum of the critical safety indices of such fissile transports does not exceed fifty (50); provided, however, that if the container is at all times isolated at least six meters from the transport, the overpack and the container in which they are stored shall not exceed one hundred if the container is not contained in such container.

(3) In the case of loading radioactive transport, etc., one vehicle (or two or more motor vehicles in the case of two or more motor vehicles connected. The same shall apply hereinafter. (excluding items stored in overpacks or packages and items stored in containers).), overpacks (except those stored in containers. The sum of the transport indices and the critical safety indices of the containers in which the goods are stored shall not exceed fifty (50). However, this does not apply when transporting with a dedicated load and meets any of the following standards.

(i) Not to carry fissile transports.

(ii) In the case of loading a fissile transport, the total critical safety index of the fissile transport shall not exceed fifty (50); provided, however, that if the vehicle is at all times isolated at least six meters from the transports not loaded in the vehicle, the overpack and the container in which they are stored, the total critical safety index of the fissile transport shall not exceed one hundred.

4. Fissile transport, an overpack in which a fissile transport is stored or packaged (hereinafter referred to as "fissile transport, etc."). and containers containing fissile transports, etc. are collected at several places in the vehicle (a container in which fissile transports, etc. and fissile transports, etc., are stored, and the distance between other fissile transports, etc., and containers in which fissile transports, etc. are stored is less than 6 meters). or when fissile transports are stored as collected goods in a container, the sum of these critical safety indices shall not exceed fifty for each collection.

5. In the case of loading IP-1 type transport, IP-2 type transport or IP-3 type

transport as specified in Article 18-3, Paragraph 2 of the Enforcement Regulations, IP-1 type transport specified in Article 3, Paragraph 2 of the Outer Transportation Regulations to be loaded on one vehicle, IP-2 type transports and IP-3 transport goods, as well as IP-1 type transports, IP-2 type transports and IP as stipulated in Article 18-3, Paragraph 2 of the Enforcement RegulationsType 3 transported goods (hereinafter referred to as "IP-type transports, etc.") (Refers to low-specific radioactive substances and surface contaminants as defined in Article 3, Paragraph 2 of the Outer Transportation Regulations, and low-specific radioisotopes and surface contaminants specified in Article 18-3, Paragraph 2 of the Enforcement Regulations). The same applies to Article 17, paragraph 12. The total amount of radioactivity shall not exceed the amount specified in the notification.

(Dose equivalent rate for vehicles, etc.)

Article 10 The dose equivalent rate in the state where radioactive transported goods are loaded on a vehicle shall not exceed the value specified in each of the following items for each of the following locations.

(i) The surface of the vehicle (if the vehicle is of an open type, the vertical surface in contact with the outer contour and the bottom of the vehicle body) The maximum dose equivalent rate is 2 millisieverts per hour.

(ii) A position one meter away from the front, rear and sides of the vehicle (or the vertical plane in contact with the outer contour of the vehicle if the vehicle is of an open type) The maximum dose equivalent rate is 100 microsieverts per hour.

(iii) The place where persons engaged in transportation by vehicle usually ride: the maximum dose equivalent rate of 20 microsieverts per hour.

(2) In the case of a vehicle carrying radioactive transport, etc., when loading and unloading are completed, the degree of contamination of the surface of the vehicle by radioactive isotopes, etc., shall not exceed the standards specified in the notification.

(Signs related to vehicles)

Article 11 Vehicles loaded with radioactive transport, etc., shall be marked on both sides and rear of the vehicle as specified in the notification (limited to both sides in the case of railways, newly constructed tracks, and cableways). It must be attached to an easy-to-see place. provided, however, that the container signs stipulated in Article 8, Paragraph 5 (including signs enlarged in accordance with the provisions of Paragraph 6 of the same Article) shall apply. In the case of transporting a large container or tank with the word "radioactive" on the container sign, and it can be seen from the outside during transportation, the container sign can be substituted for it.

2. Radioactive transports, etc., in which only the same radioactive

isotopes, etc. are stored (excluding those transported only within Japan). In the case of transporting the radioisotope, the UN number of the radioisotope, etc., shall be displayed on the vehicle in accordance with the provisions of the notification. provided, however, that container signs (including signs enlarged in accordance with the provisions of Article 8, Paragraph 6) shall be applied in accordance with the provisions of the proviso of the preceding paragraph. This does not apply in the case where it is replaced with the vehicle sign in the preceding paragraph.

3. At night, the front and rear of combined tracks, trackless trains, automobiles, and light vehicles (in the case of light vehicles, limited to the rear) for transporting radioactive transports, etc. A red light must be turned on in an easy-to-see place.

(Consolidation Limit)

Article 12 Railways or rail vehicles loaded with radioactive transports, etc., shall be those listed in Article 5, Paragraph 2, Items 1 to 3 (in the case of those listed in Item 3, the flash point shall be limited to those with a flash point of 25 degrees Celsius or less). It must be connected to the vehicle loaded with three or more cars at a distance of 3 or more. In this case, one bogie car is considered to be two.

(2) Railways or rail vehicles loaded with radioactive transports, etc., shall be connected at a distance of one or more cars with other vehicles loaded with nuclear fuel transports, etc., as stipulated in Article 12, Paragraph 1 of the Regulations for the Transportation of Radioactive Transports, etc. or Nuclear Fuel Materials, etc. (Ordinance No. 72 of the Ministry of Transport of Showa 53).

(Carrying documents describing how to handle the product)

Article 13 When transporting radioactive transport, etc., a document describing the type, quantity, handling method and other matters to be noted regarding transportation and measures to be taken in the event of an accident must be carried with you.

(Alternate drivers, etc.)

Article 14 In the case of transporting radioactive goods over long distances by motor vehicle or at night, and there is a risk that the driver will not be able to continue safe driving due to fatigue or other reasons, necessary measures shall be taken to ensure the safe operation of the vehicle, such as assigning a driver to replace him.

(Watchman)

Article 15 Radioactive Transports, etc. (excluding radioactive transports containing specified radioisotopes as stipulated in Table No. 1 of Article 24-2-8, Paragraph 1 of the Enforcement Regulations, overpacks in which such radioactive transports are stored or packaged, and containers in which such radioactive transports are stored) Parking of a combined track or trackless train vehicle, a car or a light vehicle loaded with a

combined track or a light vehicle on a road or in a place where the general public can easily approach the vehicle (Road Traffic Law (Act No. 105 of Showa 35)Article 2, Paragraph 1, Item 18). In this case, a lookout shall be assigned. However, this does not apply to cases where the non-open container or vehicle is locked or otherwise prevented by persons other than the person concerned from easily approaching the radioactive transport.

(Passenger restrictions)

Article 15-2 In the case of transporting radioactive transports, etc., listed in items 2, 3, 5, or 6 of the table of Article 8, Paragraph 1, persons other than those concerned shall not be allowed to ride in the place where the person engaged in the transportation of the motor vehicle or light vehicle carrying the radioactive transport, etc. normally rides.

(Radiation Protection Plan)

Article 15-3 Authorized Notification Users (including Users of Certified Devices with Indications) Notified distributors, notified leasing companies, licensed disposal companies, and persons entrusted with transportation by these persons (referred to as "licensed users, etc." in the following article). In order to be able to appropriately prevent radiation hazards when transporting radioactive transported goods, etc., the Radiation Protection Plan shall be established that describes the method of measuring the dose of radiation and other matters stipulated in the notification.

(Education and Training)

Article 15-4 Licensed Users, etc. shall provide education and training to persons engaged in transportation so that they possess the knowledge and skills necessary to engage in transportation with respect to the handling methods of radioactive transported materials, etc., and other matters stipulated in the notification.

(Measures for Transportation of BM-type Transported Goods)

Article 16 When transporting BM-type transports or containers containing BM-type transports, radiation measuring instruments and protective equipment must be carried with them.

2. When transporting BM-type transports or containers containing BM-type transports, a person with specialized knowledge of the handling of radioisotopes must be accompanied by a person who has the necessary supervision for the safety of the radioactive transport.

(Measures for Transportation of Specified Radioisotopes, etc.)

Article 16-2 When transporting radioactive transports containing specified radioisotopes as stipulated in Table 1 of Article 24-2-8, Paragraph 1 of the Enforcement Regulations, the following measures shall be taken:

(i) In the case of loading and transporting in an unopened vehicle or container, the vehicle or container shall be locked. However, this does not apply when measures equivalent to or higher than locking are taken

to protect specific radioactive isotopes.

(ii) Radioactive transports shall be loaded in a manner necessary for the prevention of radiation hazards and the protection of specific radioisotopes.

(3) For vehicles carrying radioactive materials, take necessary measures for the prevention of radiation hazards and the protection of specified radioisotopes.

(4) Establish a communication system necessary for the prevention of radiation hazards and the protection of specified radioisotopes.

(5) Persons responsible for the transportation of radioactive transports (limited to persons with knowledge and experience in the measures necessary for the prevention of radiation hazards and the protection of specified radioisotopes); and take necessary measures for the prevention of radiation hazards and the protection of specific radioisotopes.

(6) Assign watchmen for the transportation of radioactive transports and take necessary measures for the prevention of radiation hazards and the protection of specified radioisotopes. However, this does not apply when measures equivalent to or higher than the deployment of guards are taken to protect specific radioisotopes.

(vii) Develop appropriate plans to ensure a prompt and reliable response in the event that theft of radioactive transport, obstruction of the handling of radioactive transport, or vandalism of vehicles carrying radioactive goods or equipment or equipment necessary for the protection of certain radioisotopes is likely to take place;

(8) Detailed matters regarding measures necessary for the protection of specified radioisotopes shall be managed so that they are not known to persons other than those who are deemed to have a need to know such matters.

2. In the case of transporting radioactive transports containing specified radioisotopes as stipulated in Item 2 of Table 2 of Article 24-2-8, Paragraph 1 of the Enforcement Regulations, the preceding paragraph (excluding items 4, 6 and 7) shall be carried out. The provisions of the above shall apply mutatis mutandis. In this case, the phrase "detailed matters" in item 8 of the same paragraph shall be read as "detailed matters (limited to those related to the transportation routes of radioactive transport)".

(Transportation of low-specific radioactive isotopes, etc. that can be transported without radioactive transport)

Article 17 In the case of transporting low-specific radioisotopes specified in Article 18-11(1) of the Enforcement Regulations and surface contaminants specified in Article 18-11(1) of the Enforcement Regulations without being radioactive transport, the provisions of the following paragraphs to (17) shall be followed.

2. Low-specific radioisotopes or surface contaminants specified in the preceding paragraph (hereinafter referred to as "low-specific radioisotopes, etc.") The dose equivalent rate of the container or tank in which the dose is stored shall not exceed the value specified in each of the following items for each of the following places:
   1. Surface maximum dose equivalent rate of 2 mSv per hour
   (ii) At a distance of one meter from the surface, the maximum dose equivalent rate is 100 microsieverts per hour.
3. The surface of the container or tank in which the low-specific radioisotope is stored (limited to the outer surface in the case where the container or tank is transported with a special load) The radioactive surface density of the radioisotope shall not exceed the surface density limit.
4. Contaminants, etc. (limited to low-specific radioactive substances specified in Article 13, Item 1 of the Outer Transportation Regulations, low-specific radioisotopes specified in Paragraph 1, surface contaminants specified in Item 2 of the same Article, and surface contaminants specified in the same paragraph) Hereinafter, this Article (excluding paragraph 12) The same applies to. In addition, a transport index shall be established for containers and tanks containing contaminants, etc., and a critical safety index shall be established for containers containing fissile transports.
5. The transport index referred to in the preceding paragraph shall be a numerical value determined in accordance with the provisions of each of the following items. In this case, if the value used in the determination is 0.05 or less, the value may be set to 0 as stipulated in the notification.
   (i) Contaminants, etc. (excluding those stored in tanks) In the case of a tank in which a contaminant is stored, the value obtained by multiplying the value expressed in millisieverts per hour by the maximum dose equivalent rate at a distance of one meter from the contaminant or the surface of the tank by one hundred by the coefficient listed in the lower column of the following table, depending on the classification of the maximum cross-sectional area of the contaminant, etc. or tank. provided, however, that in the case of uranium or thorium concentrates specified in the notification, the maximum dose equivalent rate at a distance of one meter from the surface of the accumulation of the uranium or thorium concentrate (or the surface of the tank if it is stored in a tank) may be set to the value specified in the notification.

If it is less than 1 square meter	one
More than 1 square meter and less than 5 square meters	two

More than 5 square meters and less than 20 square meters	three
If it exceeds 20 square meters	ten

(ii) In the case of a container in which contaminated substances are stored, the value obtained by summing the values in the preceding item for the contaminated substance, etc. stored in the container and the tank in which the contaminated substance, etc. is stored (in the case of a container in which the transported material is stored, the transported item stored in the same container as the value (excluding the one stored in or packaged in an overpack). The value obtained by summing the values according to Article 7, Paragraph 2, Items 1 and 2 for the overpack) or the value obtained by multiplying the maximum dose equivalent rate at a distance of 1 meter from the surface of the container in millisieverts per hour by 100, according to the classification of the maximum cross-sectional area of the container listed in the upper column of the table in the preceding item, respectively, by the coefficients listed in the lower column of the same table.

6. The critical safety index referred to in paragraph (4) shall be the sum of the values obtained by dividing the number of fissile transports stored in containers by the limit of fissile transports by 50. In this case, if the number of transportation restrictions used in the determination is unlimited, the value can be set to 0.
7. Containers or tanks containing low specific radioisotopes, etc., shall be marked on the four sides of the container or on the surface of the tank as specified in the notification.
8. Large containers or tanks containing low specific radioisotopes, etc., shall be marked with container signs specified in the notification on the four sides of the large container or at four points on the surface of the tank.
9. In place of the container sign referred to in the preceding paragraph, the sign referred to in paragraph (7) or paragraph (4) of the following Article may be enlarged to the dimensions of the container sign. In this case, notwithstanding the provisions of paragraph 7 or paragraph 4 of the following Article, it is not necessary to attach the sign referred to in paragraph 7 or paragraph 4 of the following Article.
10. Of the low-specific radioisotopes, etc. with the product names specified in the notification, those with the same product name (hereinafter referred to as "the same low-specific radioisotopes, etc."). Large containers or tanks (excluding those transported only in Japan) The UN number of the low-specific radioisotope, etc., shall be displayed on the large container or tank in accordance with the provisions of the notification.
11. In the case of loading a container or tank containing low-specific

radioisotopes, etc., or low-specific radioisotopes, etc., contaminants, etc. to be loaded on a single vehicle (excluding those stored in containers or tanks) shall be loaded. Transported goods loaded in the same vehicle as the sum of the transport indices and the critical safety index of the tank containing the contaminants and the container in which the contaminants are stored (excluding those stored in overpacks or packaged and those stored in containers).), overpacks (except those stored in containers. and the sum of the transport index or critical safety index of the container in which the transported goods are stored shall not exceed fifty (50). However, this does not apply when transporting with a dedicated load and meets any of the following standards.

(i) Not to carry fissile transports.

(ii) In the case of loading a fissile transport, the total critical safety index of the fissile transport shall not exceed fifty (50); provided, however, that if the vehicle is at all times isolated from a tank containing transport, overpacks, contaminants, etc., and a container in which such goods are stored, the total critical safety index of the fissile transport shall not exceed one hundred.

12. In the case of loading a surface contaminant specified in paragraph (1), the total amount of radioactivity of the surface contaminant loaded on a vehicle and the amount of radioactivity of the surface contaminant specified in Article 13, Item 2 of the Regulations for Outer Transportation or the total amount of radioactivity of the contaminant stored in an IP-type transport or other material loaded in the same vehicle as the amount shall not exceed the amount specified in the notification.

13. In the case of a vehicle transporting a container or tank containing low-specific radioisotopes, etc., or low-specific radioisotopes, etc., when loading and unloading have been completed, the surface of the vehicle with radioactive isotopes, etc. (limited to the outer surface in the case of transportation with a dedicated load) shall be used. The degree of contamination shall not exceed the standards specified in the notification.

14. Vehicles loaded with containers or tanks containing low-specific radioisotopes, etc., or low-specific radioisotopes, etc., shall be marked on both sides and rear (in the case of railways, newly constructed tracks and cableways, they shall be limited to both sides). It must be attached to an easy-to-see place. provided, however, that the container signs specified in paragraph 8 (including signs enlarged in accordance with the provisions of paragraph 9) shall apply. In the case of transporting a large container or tank with the word ″radioactive″ on the container sign, and it can be seen from the outside during transportation, the container sign can be substituted for it.

15. Containers or tanks containing only the same low-specific radioisotopes, etc., or the same low-specific radioisotopes, etc. (excluding those transported only within Japan) In the case of transportation by vehicle, the UN number of the low-specific radioisotope, etc., shall be displayed on the vehicle in accordance with the provisions of the notification. provided, however, that container signs (including signs enlarged pursuant to the provisions of paragraph 9) pursuant to the provisions of the proviso of the preceding paragraph shall be used. This does not apply in the case where it is substituted for the vehicle sign in the preceding paragraph.
16. Railway or track vehicles loaded with containers or tanks containing low-specific radioisotopes, etc., or low-specific radioisotopes, etc., shall be transported (excluding L-type transports and L-type transports stipulated in Article 3, Paragraph 1, Item 1 of the Outer Transportation Regulations). The overpack in which the transport is stored or packaged, the tank in which the contaminant is stored, or the container in which the such goods are stored shall be connected at a distance of one or more cars from other vehicles loaded.
17. The provisions of Articles 3 to 5, Article 9, Paragraph 2, Article 10, Paragraph 1, Article 11, Paragraph 3, Article 12, Paragraph 1, and Articles 13 to 15-2 shall apply mutatis mutandis to the transportation of low-specific radioisotopes. In this case, these provisions (excluding Article 15-2) shall apply. In Article 15-2, the words "listed in Table 2, 3, 5 or 6 of Article 8, Paragraph 1" are replaced by "specified in the notification", and the words "radioactive transports, etc." are substituted for " Container or tank containing low specific radioisotopes, etc."

(Special Measures, etc.)

Article 18 Articles 6 and 9 (including cases where Article 9, Paragraph 2 applies mutatis mutandis in Paragraph 17 of the preceding Article) Article 10 (including cases where Article 10, Paragraph 1 applies mutatis mutandis in Paragraph 17 of the preceding Article). In addition, if it is extremely difficult to transport the material in accordance with the provisions of Paragraphs 1 to 3 and 11 to 13 of the preceding Article, and if necessary measures have been taken to ensure safe transportation, and if the Minister of Land, Infrastructure, Transport and Tourism approves that there is no safety hindrance to transportation without complying with these provisions, the vehicle may be transported without these provisions.

2. Article 6, Paragraph 1, Article 10, Paragraph 1, Item 2 (including cases in which Paragraph 17 of the preceding Article applies mutatis mutandis) In addition, if the Minister of Land, Infrastructure, Transport and Tourism approves that there is no safety hindrance even if it is transported without the provisions of paragraphs 1 and 2 of the preceding

Article, it may be transported without these provisions. In this case, when transporting without complying with the provisions listed in the upper column of the following table, each of them must comply with the standards listed in the lower column of the same table.

(i) Article 6, Paragraph 1, Item 1	(b) To be transported with a dedicated load. (b) Take measures to prevent persons other than the person concerned from approaching the overpack or container. (c) Do not load or unload during transportation. (d) The maximum dose equivalent rate on the surface does not exceed 10 millisieverts per hour.
(ii) Article 6, Paragraph 1, Item 2	It must be transported with a special load.
(iii) Article 10, Paragraph 1, Item 2 (including cases in which Paragraph 17 of the preceding Article applies mutatis mutandis))	The maximum dose equivalent rate does not exceed 100 microsieverts per hour at a distance of 2 meters from the front, rear and sides of the vehicle (or if the vehicle is an open type, the vertical plane in contact with its outer contour).
(4) Paragraph 2, Item 1 of the preceding Article	(b) To be transported with a dedicated load. (b) Take measures to prevent persons other than the person concerned from approaching the container or tank. (c) Do not load or unload during transportation. (d) The maximum dose equivalent rate on the surface does not exceed 10 millisieverts per hour.
5. Paragraph 2, Item 2 of the preceding Article	It must be transported with a special load.

(3) In the case of transporting radioisotopes, etc., or radioactive transported materials with the approval of the Nuclear Regulation Authority pursuant to the provisions of Article 18-5, Item 7 and Item 8, Article 18-6, Item 1, Article 18-7, Item 8, Article 18-9, Paragraph 1, Item 1 and Paragraph 2, Item 1, Article 18-10, Paragraph 1, Item 1 and Article 18-12, Measures necessary to ensure safe transportation (except

for Article 18-5, Item 8 and Article 18-12 of the Enforcement Regulations) In the event that a radioactive transport with a dose equivalent rate of more than 2 mSv per hour and less than or equal to 10 mSv per hour is to be transported with the approval of the Nuclear Regulation Authority (NRA), the following measures shall be taken) and approval from the Minister of Land, Infrastructure, Transport and Tourism shall be obtained to the effect that there is no hindrance to safety.

(i) Take measures to prevent persons other than the person concerned from approaching the radioactive transport.

(ii) Do not load or unload during transportation.

4. In the case of transporting containers or tanks containing radioisotopes, radioactive transports, low-specific radioisotopes, etc., or low-specific radioisotopes, etc., pursuant to the provisions of paragraph (1) and the preceding paragraph, they must be transported with a dedicated load, and notwithstanding the provisions of Article 8, paragraph 1 or paragraph 7 of the preceding Article, their surfaces (excluding the surfaces of radioactive isotopes, etc. and low-specific radioisotopes, etc.) shall be transported. (In the case of a container or tank, the four sides of the container or the four places on the surface of the tank) shall be marked with the signs specified in the notification.

(Confirmation of Transportation Safety)

Article 19 Article 16 of the Enforcement Order of the Act on the Control of Radioisotopes, etc. (Cabinet Order No. 259 of Showa 35) (including cases where it is read and applied in accordance with the provisions of Article 19-3 of the same Order) Radioactive isotopes, etc., specified by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism shall be radioisotopes transported as BM-type transported goods or BU-type transports.

Article 20 Confirmation by the Minister of Land, Infrastructure, Transport and Tourism under Article 18, Paragraph 2 of the Act (hereinafter referred to as "Confirmation of Transportation Safety") A person who intends to receive the transportation must submit a plan for transportation to the Minister of Land, Infrastructure, Transport and Tourism before transportation.

Article 21 When the Minister of Land, Infrastructure, Transport and Tourism confirms the safety of transportation, the Minister of Land, Infrastructure, Transport and Tourism shall issue a confirmation certificate.

(Reporting Collection)

Article 22 To the extent necessary for the enforcement of the provisions of Article 18, Paragraph 1, Paragraph 2, and Paragraph 4 of the Act, the Minister of Land, Infrastructure, Transport and Tourism shall appoint a licensed notified user (including a user who has notified a notification

of an authentication device with a label). Notified distributors, notified leasing companies, licensed disposal companies, and persons entrusted with transportation by these parties may be required to report on the status of transportation of radioisotopes, etc., and other matters.

Supplementary Provisions Extract

(Effective Date)

1. This Ministerial Ordinance shall come into effect on January 1, 1953.

Supplementary Provisions (Ministry of Transport Ordinance No. 73 of December 28, 1953)

This Ministerial Ordinance shall come into effect on January 4, 1954 from the date of enforcement of the provisions listed in Article 1, Item 3 of the Supplementary Provisions of the Act for Partial Revision of the Atomic Energy Basic Law, etc. (Act No. 86 of 1953).

Supplementary Provisions (Ministry of Transport Ordinance No. 34 of October 24, 1955)

This Ministerial Ordinance shall come into effect from the date of promulgation.

Supplementary Provisions (Ministry of Transport Ordinance No. 26 of May 18, 1956)

This Ministerial Ordinance shall come into effect on May 18, 1956 (May 18, 1956) of the Act to Partially Amend the Act on the Prevention of Radiation Hazards Caused by Radioactive Isotopes, etc. (Act No. 52 of 1955).

Supplementary Provisions (Ministry of Transport Ordinance No. 5 of February 27, 2019)

(Effective Date)

Article 1 This Ministerial Ordinance shall be effective on April 1 of the first year of Heisei (hereinafter referred to as the "Enforcement Date"). It will be enforced from the following.

(Transitional Measures Accompanying the Partial Revision of the Regulations for the Transportation of Radioisotopes, etc.)

Article 5 The provisions of the Regulations for the Transportation of Radioisotopes in Vehicles after the amendment pursuant to the provisions of Article 8 shall apply to the transportation of radioisotopes, etc., commencing on or after the effective date, and the provisions of the previous example shall apply to the transportation of radioisotopes, etc., commencing before the same date.

Supplementary Provisions (Ministry of Transport Ordinance No. 34 of December 3, 2002)

(Effective Date)

Article 1 This Ministerial Ordinance shall be effective on January 1, 2003 (hereinafter referred to as the "Enforcement Date"). It will be enforced from the following.

(Transitional Measures)

Article 2 Radioactive isotopes, etc., or nuclear fuel materials, etc., currently being transported at the time of enforcement of this Ministerial Ordinance shall continue to be subject to the previous precedent until such transportation is completed.

2. The Act on the Prevention of Radiation Hazards Caused by Radioactive Isotopes, etc. (hereinafter referred to as the "Radiation Hazard Prevention Act") shall be implemented in accordance with the provisions of the Regulations for Transportation of Radioisotopes in Vehicles prior to the amendment pursuant to the provisions of Article 1 or the Regulations for the Transportation of Nuclear Fuel Materials prior to the amendment pursuant to the provisions of Article 2. Article 18-2, Paragraph 2 or the Act on the Regulation of Nuclear Source Materials, Nuclear Fuel Materials and Nuclear Reactors (hereinafter referred to as the "Nuclear Reactor Regulation Act"). Article 59-2, paragraph (2) (including cases in which Article 66, paragraph (2) applies mutatis mutandis). (including confirmation conducted by the designated transportation method confirmation organization stipulated in Article 41-11, Paragraph 1 of the Radiation Hazard Prevention Act or Article 61-43, Paragraph 1 of the Nuclear Reactor Regulation Act). Notwithstanding the provisions of the Regulations for the Transportation of Radioisotopes or Nuclear Fuel Materials after the amendment pursuant to the provisions of Article 1 or the Regulations for the Transportation of Nuclear Fuel Materials and Other Materials after the amendment pursuant to the provisions of Article 2, the transportation of radioisotopes or nuclear fuel materials commencing on or after the effective date shall continue to be in accordance with the previous precedent until such transportation is completed.

Supplementary Provisions (Ministry of Transport Ordinance No. 52 of September 28, 2007)

This Ministerial Ordinance shall come into effect on September 30, 2007 from the date of enforcement of the Act on the Prevention of Radiation Hazards by Radioactive Isotopes, etc. (Act No. 59 of 1977).

Supplementary Provisions (Ministry of Transport Ordinance No. 12 of March 18, 1999)

This Ministerial Ordinance shall come into effect from the date of enforcement of the Act on Partial Revision of the High Pressure Gas Control Act and the Act on Ensuring Safety and Optimizing Transactions of Liquefied Petroleum Gas (April 1, 2009).

Supplementary Provisions (Ministry of Transport Ordinance No. 39 of November 29, 2012)

(Effective Date)

Article 1 This Ministerial Ordinance shall come into effect on January 6, 2013.

Supplementary Provisions (June 25, 2013 Ministry of Land, Infrastructure, Transport and Tourism Ordinance No. 101)

(Effective Date)

Article 1 This Ministerial Ordinance shall be effective on July 1, 2013 (hereinafter referred to as the "Enforcement Date"). It will be enforced from the following.

(Transitional Measures Accompanying the Partial Revision of the Regulations for the Transportation of Radioisotopes, etc.)

Article 4 With respect to radioisotopes, etc., currently being transported at the time of enforcement of this Ministerial Ordinance, the Regulations for the Transportation of Radioisotopes, etc. (hereinafter referred to as the "New Regulations" in this Article) after the amendment pursuant to the provisions of Article 3 shall apply until such transportation is completed. Notwithstanding the provisions of the above, the previous example shall apply.

2. The Act on the Prevention of Radiation Hazards Caused by Radioactive Isotopes, etc. (hereinafter referred to as the "Radiation Hazard Prevention Act" in this Article) shall be enacted in accordance with the provisions of the Regulations for the Transportation of Radioisotopes in Vehicles prior to the amendment pursuant to the provisions of Article 3 prior to the effective date. Confirmation stipulated in Article 18-2, Paragraph 2 (including confirmation conducted by the Designated Transportation Method Confirmation Organization stipulated in Article 41-11, Paragraph 1 of the Radiation Hazard Prevention Act) Notwithstanding the provisions of the new regulations, the previous example shall continue to apply to radioisotopes transported on or after the effective date.

3. The Minister of Land, Infrastructure, Transport and Tourism may confirm Article 18-2, Paragraph 2 of the Act on Prevention of Radiation Hazards in accordance with the provisions of the new regulations even before the effective date.

(Transitional Measures Concerning Penalties)

Article 6 The application of penalties to acts committed before the effective date and acts committed after the effective date with respect to matters that are still subject to previous examples pursuant to the provisions of these Supplementary Provisions shall continue to be in accordance with the previous precedents.

Supplementary Provisions (December 24, 16, Ministry of Land, Infrastructure, Transport and Tourism Ordinance No. 109)

(Effective Date)

Article 1 This Ministerial Ordinance shall come into effect on January 1, 2017.

(Transitional Measures Accompanying the Partial Revision of the Regulations for the Transportation of Radioisotopes, etc.)

Article 2 Notwithstanding the provisions of the Regulations for the Transportation of Radioisotopes in Vehicles after the amendment pursuant to the provisions of Article 1, the previous example shall continue to apply to the radioisotopes, etc., that are currently being transported at the time of enforcement of this Ministerial Ordinance until the transportation is completed.

Supplementary Provisions (Ministry of Land, Infrastructure, Transport and Tourism Ordinance No. 61, June 1, 17)

This Ministerial Ordinance shall come into effect from the date of enforcement of the Act on the Prevention of Radiation Hazards Caused by Radioactive Isotopes, etc. (June 1, 17).

Supplementary Provisions (December 1, 17, Ministry of Land, Infrastructure, Transport and Tourism Ordinance No. 110)

(Effective Date)

Article 1 This Ministerial Ordinance shall come into effect from the date of promulgation.

Supplementary Provisions (Ministry of Land, Infrastructure, Transport and Tourism Ordinance No. 119 of December 26, 18)

This Ministerial Ordinance shall come into effect on January 1, 2019.

Supplementary Provisions (March 30, 2014 Ministry of Land, Infrastructure, Transport and Tourism Ordinance No. 31)

(Effective Date)

Article 1 This Ministerial Ordinance shall come into effect from the date of enforcement of the Act on the Prevention of Radiation Hazards Caused by Radioactive Isotopes, etc. (April 1, 2014).

(Transitional Measures Accompanying the Partial Revision of the Regulations for the Transportation of Radioisotopes, etc.)

Article 3 Notwithstanding the provisions of the Regulations for the Transportation of Radioisotopes, etc., as amended pursuant to the provisions of Article 2, the Regulations for the Transportation of Radioactive Isotopes, etc., as amended pursuant to the provisions of Article 2, until the transportation of radioactive isotopes, etc., contaminated by the radiation prescribed in Paragraph 1 of Article 2 of the Act on the Prevention of Radiation Hazards Caused by Radioactive Isotopes, etc. (Act No. 167 of Showa 32) is currently being transported at the time of enforcement of this Ministerial Ordinance. , according to the previous example.

Supplementary Provisions (Ministry of Land, Infrastructure, Transport and Tourism Ordinance No. 75 of September 14, 2014)

This Ministerial Ordinance shall come into effect from the date of enforcement of the Act on the Establishment of the Nuclear Regulation Authority (September 19, 2014). provided, however, that the provisions set forth in the following items shall come into effect from the date specified in each item.

(i) Article 4 (limited to the amended provisions of Article 18, Paragraph 3 of the Regulations for the Transportation of Radioisotopes, etc.) Article 7, Article 11 and Article 12 The date of enforcement of the provisions listed in Article 1, Item 3 of the Supplementary Provisions of the Act on the Establishment of the Nuclear Regulation Authority (April 1, 2015)

Supplementary Provisions (Ministry of Land, Infrastructure, Transport and Tourism Ordinance No. 95 of December 26, 2016)

(Effective Date)

1. This Ministerial Ordinance shall be effective on January 1, 2017 (referred to as the "Enforcement Date" in the following paragraph). It will be enforced from the following.

(Transitional Measures)

2. The provisions of the Regulations for the Transportation of Radioisotopes and the Regulations for the Transportation of Nuclear Fuel Materials, etc., as amended by this Ministerial Ordinance shall apply to the transportation of radioisotopes or nuclear fuel materials commencing on or after the effective date, and the provisions of the Regulations for the Transportation of Radioisotopes or Nuclear Fuel Materials commencing before the same date shall continue to apply.

Supplementary Provisions (Ministry of Land, Infrastructure, Transport and Tourism Ordinance No. 3 of January 19, 30)

This Ministerial Ordinance shall come into effect from the date of enforcement of the provisions listed in Article 1, Item 3 of the Supplementary Provisions of the Act on the Partial Revision of the Act on the Regulation of Nuclear Source Materials, Nuclear Fuel Materials and Nuclear Reactors for the Enhancement of Safety Measures in the Use of Nuclear Energy.

Supplementary Provisions (December 26, 1930 Ministry of Land, Infrastructure, Transport and Tourism Ordinance No. 90)

(Effective Date)

1. This Ministerial Ordinance shall come into effect from the date of enforcement of the provisions set forth in Article 1 of the Supplementary Provisions of the Act on the Partial Revision of the Act on the Regulation of Nuclear Source Materials, Nuclear Fuel Materials and Nuclear Reactors for the Enhancement of Safety Measures in the Use of Nuclear Energy.

(Transitional Measures Accompanying the Partial Revision of the Regulations for the Transportation of Radioisotopes, etc.)

2. The provisions of the Regulations for the Transportation of Radioisotopes in Vehicles after the amendment by this Ministerial Ordinance shall apply to the transportation of radioisotopes, etc., commencing on or after the effective date, and the previous examples shall apply to the transportation of radioisotopes, etc., commencing

before the same date.