

# Regulation for Enforcement of the Air Pollution Control Act (Tentative translation)

(Order of the Ministry of Health and Welfare, Ministry of International Trade and Industry No. 1 of June 22, 1971)

(Terms)

Article 1 The terms that are used in this Ministerial Order are used in the same way as the terms that are used in the Air Pollution Control Act (Act No.97 of 1968; hereinafter referred to as "the Act") and the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No.329 of 1968; hereinafter referred to as "the Order").

(Heat Transmission Area)

Article 2 The calculation method of the heat transmission area as set forth in the right-hand column of item 22 of the Appended Table 1 of the Order shall be as prescribed by the heat transmission area item in Japanese Industrial Standards (JIS) B8201 and B8203.

(Emissions Standards for Sulfur Oxides)

Article 3 (1) The emission standard for sulfur oxides under the provisions of Article 3, paragraph (1) of the Act is the amount of sulfur oxides calculated based on the following formula:

$$q=K \times 10^{-3} H_e^2$$

(In this formula,  $q$ ,  $K$ , and  $H_e$  represent each of the following values:

$q$ : the amount of sulfur oxides (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

$K$ : the value set forth in the right-hand column of row 1 of Appended Table 1 for each region specified by Cabinet Order as referred to in Article 3, paragraph (2), item (i) of the Act; and

$H_e$ : the outlet height as corrected in the way that is prescribed in the following paragraph (unit: meters))

(2) The correction of outlet heights provided for in Article 3, paragraph (2), item (i) of the Act is based on the following formulae:

$$H_e = H_o + 0.65 (H_m + H_t)$$

$$H_m = 0.795 \sqrt{(Q \cdot V) / (1 + (2.58/V))}$$

$$H_t = 2.01 \times 10^{-3} \cdot Q \cdot (T - 288) \cdot (2.30 \log J + (1/J) - 1)$$

$$J = (1/\sqrt{(Q \cdot V) / (1460 - 296 \times (V / (T - 288)))) + 1$$

(In these formulae,  $H_e$ ,  $H_o$ ,  $Q$ ,  $V$  and  $T$  represent the following values:

He: the adjusted height of the outlet (unit: meters);  
Ho: the actual height of the outlet (unit: meters);  
Q: the amount of emission gases at a temperature of 15 degrees (unit: cubic meters per second);  
V: the discharge rate of the emission gases (unit: meters per second);  
T: the temperature of the emission gases (unit: absolute temperature).

(Soot and Dust Emissions Standards)

Article 4 The soot and dust emission standard under the provisions of Article 3, paragraph (1) of the Act is the amount of soot and dust set forth in the fourth column of Appended Table 2 per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in the second column of that table and scale set forth in the third column 3 of that table.

(Hazardous Substances Emissions Standards)

Article 5 The emissions standards for hazardous substances under the provisions of Article 3, paragraph (1) of the Act (excluding a designated hazardous substance) are as set forth in each of the following items for the types of hazardous substances set forth in those items, per cubic meter of emission gases normalized to conditions with a temperature of zero degrees and a pressure of one atmosphere:

- (i) a hazardous substance as set forth in Article 1, items (i) through (iv) of the Order: the amount of hazardous substance set forth in the fourth column of Appended Table 3 for each type of substance set forth in the second column of that table and type of unit set forth in the third column of that table;
- (ii) nitrogen oxides: the amount of nitrogen oxides set forth in the fourth column of Appended Table 3-2 for each type of unit set forth in the second column of that table (excluding one that uses electricity as heat source) and scale set forth in the third column of that table.

(Standards for Units Emitting Mercury)

Article 5-2 The standard established by Order of the Ministry of the Environment that is referred to in Article 3-5 of the Order is that the relevant unit falls under the type and scale of unit set forth in the middle column of Appended Table 3-3.

(Calculation Method)

Article 6 (1) The calculation of values provided for by Order of the Ministry of the Environment that is referred to in Article 6, paragraph (2) of the Order is done as set forth in items (i) through (iii) for sulfur oxides, and as set forth in

item (iv) for soot and dust:

- (i) a sulfur oxides measuring instrument that applies a conductometric method is used to measure the hourly value by drawing in atmospheric air continuously for one hour;
  - (ii) the one-day average of hourly values is calculated as an arithmetic average of the measured values during all valid measurement hours in one day (but only if this is at least 20 hours);
  - (iii) if sulfur oxides have not been measured continuously on every day throughout the year (but only if the total number of valid measurement days in the year is 250 or more), the number of days out of a year that is prescribed in Article 6, paragraph (1), item (i) of the Order is the adjusted number of days arrived at when the referenced number of days out of the year is multiplied by the value arrived at when the total number of valid measurement days in the year is divided by the total number of days in the year;
  - (iv) if a high volume air sampler or low volume air sampler is used, the year's average value for the amount of soot and dust in the atmosphere is calculated as an arithmetic average of the measured values obtained when the sampler draws in atmospheric air for 24 consecutive hours on a single occasion once or more a month, in principle; if a measuring instrument employing light scattering techniques is used, the year's average value for the amount of soot and dust in the atmosphere is calculated as an arithmetic average of the measured values during all valid measurement hours (but only if this is at least 6,000 hours).
- (2) In applying the provisions of Article 3, paragraph (3) of the Act, a value is to be measured at two measurement points for two years, in principle.

(Special Emissions Standards)

- Article 7 (1) The emission standard for sulfur oxides under the provisions of Article 3, paragraph (3) of the Act in an area as set forth in Appended Table 4 is the amount of sulfur oxides calculated based on the formula referred to in Article 3, paragraph (1), using the value set forth in the relevant of the following items as the value of "K" for an area set forth in that item:
- (i) areas set forth in items (iv), (v), (ix), (xi), (xiii) and (xv) of Appended Table 4: 1.17
  - (ii) areas set forth in items (iii), (viii), (x), (xiv), (xvi), (xvii), (xviii) and (xxvi) of Appended Table 4: 1.75
  - (iii) areas set forth in items (i), (ii), (vi), (vii), (xii), (xix), (xx), (xxi), (xxii), (xxiii), (xxiv), (xxv), (xxvii) and (xxviii) of Appended Table 4: 2.34
- (2) The emission standard for soot and dust under the provisions Article 3, paragraph (3) of the Act in an area as set forth in Appended Table 5 is the

amount of the soot and dust set forth in the fifth column of Appended Table 2 per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in the second column of that table and scale set forth in the third column of that table.

(Standards for Scale of Specified Factories)

Article 7-2 (1) For sulfur oxides, the standards specified by Order of the Ministry of the Environment that are referred to in Article 5-2, paragraph (1) of the Act are that the amount of raw materials and fuel that is used at all of the units generating soot or smoke that are associated with sulfur oxides and that have been installed at a factory or place of business, calculated as the equivalent amount of heavy oil, is within the scope of 0.1 kiloliter or more but not more than 1.0 kiloliters per hour.

(2) For nitrogen oxides, the standards specified by Order of the Ministry of the Environment that are referred to in Article 5-2, paragraph (1) of the Act are that the amount of raw materials and fuel used at all units generating soot and smoke that are associated with nitrogen oxides and that have been installed at a factory or place of business, calculated as the equivalent amount of heavy oil in consideration of things such as the emission characteristics of nitrogen oxides for the type of unit generating soot or smoke, is within the scope of 1 kiloliter or more but not more than 10 kiloliters per hour.

(3) The equivalency conversion referred to in the preceding two paragraphs is done as prescribed by the Minister of the Environment for each type of raw material and fuel.

(Standards Regulating the Total Amount of Emissions)

Article 7-3 (1) The standards regulating the total amount of emissions of sulfur oxides are to be established as the amount of sulfur oxides specified in either of the following items:

(i) the amount of sulfur oxides calculated so that the amount of sulfur oxides it is allowable to emit will increase in line with the increase in the amount of raw materials and fuel being used at all of the units generating soot or smoke that are associated with sulfur oxides and that have been installed at a specified factory or place of business and so that the increment of the amount of sulfur oxides it is allowable to emit in line with the increase per unit in the amount of raw materials and fuel used in a unit generating soot or smoke will gradually decrease;

(ii) the amount of sulfur oxides calculated so that the maximum polymerized concentration of sulfur dioxide above the ground measured by the prescribed means for sulfur oxides emitted from all of the units generating soot or

smoke that are associated with sulfur oxides and that have been installed at a specified factory or place of business (hereinafter referred to as "maximum polymerized concentration above the ground") will become the constant value for all specified factories and places of business located in the designated region; provided, however, that if three or more specified factories or places of business are close to each other and it is found to be appropriate to treat them as one specified factory or place of business, it is permissible to make this the amount of sulfur oxides calculated using the special value in place of the constant value.

(2) For sulfur oxides, the standards regulating the total amount of emissions referred to in Article 5-2, paragraph (1) of the Act are to be established using a formula based on the formula prescribed in item (i) if the standards are established as the amount of sulfur oxides set forth in item (i) of the preceding paragraph, and using the formula prescribed in item (ii) if the standards are established as the amount of sulfur oxides set forth in item (ii) of the preceding paragraph:

(i)  $Q = a \cdot Wb$

(In this formula, Q, W, a, and b represent the following values:

Q: the amount of sulfur oxides that it is permissible to emit (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

W: the amount of raw materials and fuel used at all of the units generating soot and smoke that are associated with sulfur oxides and that have been installed at a specified factory or place of business (unit: kiloliters per hour of the equivalent amount of heavy oil calculated as prescribed paragraph (3) of the preceding Article);

a: the constant that the prefectural governor sets so that the target volume of reduction can be achieved;

b: the constant that the prefectural governor sets within the scope of 0.80 or more and less than 1.0, in consideration of the status of distribution of, and actual conditions of use of raw materials or fuel by, specified factories and places of business of each scale in the designated region.)

(ii)  $Q = (C_m / C_{m0}) \cdot Q_0$

(In this formula, Q, Q<sub>0</sub>, C<sub>m</sub>, and C<sub>m0</sub> represent the following values:

Q: the amount of sulfur oxides it is allowable to emit (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

Q<sub>0</sub>: the amount of sulfur oxides emitted from all of the units generating soot and smoke that are associated with sulfur oxides and that have been installed at a specified factory or place of business (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree

temperature at one atmosphere of pressure;

C<sub>m</sub>: the maximum polymerized concentration above the ground that the prefectural governor sets so that the target volume of reduction can be achieved (unit: parts per million by volume); provided, however, that if the calculation is made using a special value pursuant to the provisions of item (ii) of the preceding paragraph, proviso, the C<sub>m</sub> for the three or more specified factories or places of business is to be established so that the total exceeds 1.5 times but does not exceed 2 times the maximum polymerized concentration above the ground that the prefectural governor sets;

C<sub>m0</sub>: the maximum polymerized concentration above the ground associated with the Q<sub>0</sub> (unit: parts per million by volume).

- (3) For sulfur oxides, the standards regulating the total amount of emissions that are referred to in Article 5-2, paragraph (3) of the Act are to be established using a formula based on the formula set forth in item (i), when standards regulating the total amount of emissions referred to in paragraph (1) of that Article for sulfur oxides are being established pursuant to Article 1, paragraph (1), and based on the formula set forth in item (ii), when the standards regulating the total amount of emissions referred to in Article 5-2, paragraph (1) of the Act are being established pursuant to Article 1, paragraph (1), item (ii):

(i)  $Q = a \cdot W^{b+r} \cdot a\{(W+W_i)^b - W^b\}$

(In this formula, Q, W, W<sub>i</sub>, a, b, and r represent the following values:

Q: the amount of sulfur oxides it is allowable to emit (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

W: the amount of raw materials and fuel used at all of the units generating soot and smoke that are associated with sulfur oxides and that have been installed at a specified factory or place of business (excluding W<sub>i</sub>) (unit: kiloliters per hour of the equivalent amount of heavy oil calculated as prescribed in paragraph (3) of the preceding Article);

W<sub>i</sub>: the amount of raw materials and fuel that will be used at all of the units generating soot and smoke that are associated with sulfur oxides and that will be installed at a specified factory or place of business after the date that the prefectural governor sets (unit: kiloliters per hour of the equivalent amount of heavy oil calculated as prescribed in paragraph (3) of the preceding Article);

a: the constant that the prefectural governor sets so that the target volume of reduction can be achieved (this is to be the same value as "a" used in the formula under item (i) of the preceding paragraph);

b: the constant that the prefectural governor sets within the scope of 0.80 or more and less than 1.0, in consideration of the status of distribution of, and

actual conditions of use of raw materials or fuel by, specified factories and places of business of each scale in the designated region (this is the same value as the "b" that is used in the formula referred to in item (i) of the preceding paragraph).

r: the constant that the prefectural governor sets within the scope of 0.3 or more and not more than 0.7, in consideration of things such as shifts in the establishment status of specified factories and places of business in the designated region.)

(ii)  $Q=r \cdot (C_m/C_{mi}) \cdot Q_i$

Provided, however, that for a specified factory or place of business in which a unit generating soot or smoke that is associated with sulfur oxides has been newly installed (including those that newly become a specified factory or place of business through installation or change of something such as the structure of a unit generating soot or smoke that is associated with sulfur oxides), this is to be based on the following formula:

$$Q=(C_m/(C_{m0}+C_{mi}))(Q_0+Q_i)$$

(In this formula, Q, Q<sub>i</sub>, Q<sub>0</sub>, C<sub>m</sub>, C<sub>mi</sub>, C<sub>m0</sub>, and r represent the following values:

Q: the amount of sulfur oxides it is allowable to emit (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

Q<sub>i</sub>: the amount of sulfur oxides that will be emitted from all of the units generating soot and smoke that are associated with sulfur oxides and that will be installed at a specified factory or place of business after the date that the prefectural governor sets (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

Q<sub>0</sub>: the amount of sulfur oxides emitted from all of the units generating soot and smoke that are associated with sulfur oxides and that have been installed at a specified factory or place of business (excluding Q<sub>i</sub>) (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

C<sub>m</sub>: the maximum polymerized concentration above the ground that the prefectural governor sets so that the target volume of reduction can be achieved (unit: parts per million by volume) (this is the same value as the C<sub>m</sub> that has been set as the constant value being used in the formula referred to in item (ii) of the preceding paragraph); provided, however, that if the calculation is made using a special value pursuant to the provisions of the proviso of paragraph (1), item (ii), the C<sub>m</sub> for the three or more specified factories or places of business is to be set so that the total exceeds 1.5 times but does not exceed 2 times the maximum polymerized concentration above

the ground that the prefectural governor sets;

$C_{mi}$ : the maximum polymerized concentration above the ground associated with the  $Q_i$  (unit: parts per million by volume); provided, however, that the  $C_{mi}$  in the formula referred to in the proviso is the increase in the maximum polymerized concentration above the ground of the specified factory or place of business associated with that  $Q_i$ .

$C_{mo}$ : the maximum polymerized concentration above the ground associated with the  $Q_o$  (unit: parts per million by volume).

$r$ : the constant that the prefectural governor sets within the scope of 0.3 or more and not more than 0.7, in consideration of things such as shifts in the establishment status of specified factories and places of business in the designated region.)

- (4) If it is difficult for a prefectural governor to abide by the provisions of paragraph (1), the prefectural governor may establish standards regulating the total amount of emissions from sulfur oxides as separately specified by the Minister of the Environment.

Article 7-4 (1) The standards regulating the total amount of emissions from nitrogen oxides are to be established as the amount of nitrogen oxides specified in any of the following items:

- (i) the amount of nitrogen oxides calculated so that the amount of nitrogen oxides it is allowable to emit will increase in line with the increase in the amount of raw materials and fuel at all of the units generating soot and smoke that are associated with nitrogen oxides and that have been installed at a specified factory or place of business and so that the increment of the amount of nitrogen oxides it is allowable to emit in line with the increase per unit in the amount of raw materials and fuel used in a unit generating soot or smoke will gradually decrease;
- (ii) the amount of nitrogen oxides arrived at when the reduction constant is multiplied by the amount that has been arrived at by a reasonable calculation that takes into consideration things such as the status of distribution of specified factories and places of business of each scale in the designated region, for the total of the amount arrived at when the amount of emission gases emitted from all of the units generating soot and smoke that are associated with nitrogen oxides and that have been installed at a specified factory or place of business is multiplied by the unit coefficient that is set for each type of unit generating soot or smoke.
- (2) For nitrogen oxides, the standards regulating the total amount of emissions that are referred to in Article 5-2, paragraph (1) of the Act are to be established using a formula that is based on the formula set forth in item (i) if the standards are established as the amount of nitrogen oxides under item (i)



of the preceding paragraph, or the formula set forth in item (ii) if the standards are established as the amount of nitrogen oxides under item (ii) of the preceding paragraph:

(i)  $Q=a \cdot Wb$

(In this formula, Q, W, a, and b represent the following values:

Q: the amount of nitrogen oxides it is allowable to emit (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

W: the amount of raw materials and fuel used at all of the units generating soot and smoke that are associated with nitrogen oxides and that have been installed at a specified factory or place of business (unit: kiloliters per hour of the equivalent amount of heavy oil calculated as prescribed in Article 7-2, paragraph (3));

a: the constant that the prefectural governor sets so that the target volume of reduction can be achieved;

b: the constant that the prefectural governor sets within the scope of 0.80 or more and less than 1.0, in consideration of the status of distribution of, and actual conditions of use of raw materials or fuel by, specified factories and places of business of each scale in the designated region.)

(ii)  $Q=\kappa\{\Sigma(C \cdot V)\}l$

(In this formula, Q, C, V,  $\kappa$ , and l represent the following values:

Q: the amount of nitrogen oxides it is allowable to emit (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

C: the unit coefficient that the prefectural governor sets for each type of unit generating soot or smoke that is associated with nitrogen oxides;

V: the amount of emission gases for each of the units generating soot and smoke that are associated with nitrogen oxides and that are installed at a specified factory or place of business (unit: tens of thousands of cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

$\kappa$ : the reduction constant that the prefectural governor sets so that the target volume of reduction can be achieved;

l: the constant that the prefectural governor sets within the scope of 0.80 or more and less than 1.0, in consideration of things such as the status of distribution of specified factories and places of business of each scale in the designated region and the emission characteristics of nitrogen oxides.)

(3) For nitrogen oxides, the standards regulating the total amount of emissions referred to in Article 5-2, paragraph (3) of the Act are to be established using a formula based on the formula set forth in item (i) when the standards regulating the total amount of emissions referred to in paragraph (1) of that

Article which are associated with nitrogen oxides are being established pursuant to paragraph (1), item (i), and based on the formula set forth in item (ii) when the standards regulating the total amount of emissions referred to in Article 5-2, paragraph (1) which are associated with nitrogen oxides are being established pursuant to paragraph (1), item (ii):

(i)  $Q = a \cdot W^b + r \cdot a \{(W + W_i)^b - W^b\}$

(In this formula, Q, W,  $W_i$ , a, b, and r represent the following values:

Q: the amount of nitrogen oxides it is allowable to emit (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

W: the amount of raw materials and fuel used at all of the units generating soot and smoke that are associated with nitrogen oxides and that have been installed at a specified factory or place of business (excluding  $W_i$ ) (unit: kiloliters per hour of the equivalent amount of heavy oil calculated as prescribed in Article 7-2, paragraph (3));

$W_i$ : the amount of raw materials and fuel that will be used at all of the units generating soot and smoke that are associated with nitrogen oxides and that will be installed at a specified factory or place of business after the date that the prefectural governor sets (unit: kiloliters per hour of the equivalent amount of heavy oil calculated as prescribed in Article 7-2, paragraph (3));

a: the constant that the prefectural governor sets so that the target volume of reduction can be achieved (this is the same value as the "a" that is used in the formula under item (i) of the preceding paragraph);

b: the constant that the prefectural governor sets within the scope of 0.80 or more and less than 1.0, in consideration of the status of distribution of, and actual condition of use of raw materials or fuel by, specified factories and places of business of each scale in the designated region (this is the same value as the "b" that is used in the formula referred to in item (i) of the preceding paragraph).

r: the constant that the prefectural governor sets within the scope of 0.3 or more and not more than 0.7, in consideration of things such as shifts in the establishment status of specified factories and places of business in the designated region.)

(ii)  $Q = \kappa \{ \Sigma(C \cdot V) + \Sigma(C_i \cdot V_i) \} l$

(In this formula, Q, C,  $C_i$ , V,  $V_i$ ,  $\kappa$ , and l represent the following values:

Q: the amount of nitrogen oxides it is allowable to emit (unit: cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

C: the unit coefficient that the prefectural governor sets for each type of unit generating soot or smoke that is associated with nitrogen oxides (this is the same value as the "C" that is used in the formula referred to in item (ii) of

the preceding paragraph);

$C_i$ : the unit coefficient that the prefectural governor sets for each type of unit generating soot or smoke that is associated with nitrogen oxides and that will be installed in a specified factory or place of business after the date referred to in  $V_i$  which the prefectural governor sets

$V$ : the amount of emission gases for each of the units generating soot and smoke that are associated with nitrogen oxides and that are installed at a specified factory or place of business (excluding those to be installed after the date specified by a prefectural governor referred to in  $V_i$ ) (unit: tens of thousands of cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

$V_i$ : the amount of emission gases for each of the units generating soot and smoke that are associated with nitrogen oxides and that will be installed at a specified factory or place of business after the date that the prefectural governor sets (unit: tens of thousands of cubic meters per hour, calculated as if measured under conditions of a zero-degree temperature at one atmosphere of pressure;

$\kappa$ : the reduction constant that the prefectural governor sets so that the target volume of reduction can be achieved (this is the same value as the " $\kappa$ " that is used in the formula referred to in item (ii) of the preceding paragraph);

$l$ : the constant that the prefectural governor sets within the scope of 0.80 or more and less than 1.0, in consideration of things such as the status of distribution of specified factories and places of business of each scale in the designated region and the emission characteristics of nitrogen oxides (this is the same value as the " $l$ " that is used in the formula under item (ii) of the preceding paragraph).)

(4) The value of  $C$  to be used in the formula referred to in paragraph (2), item (ii), and the value of  $C$  and  $C_i$  to be used in the formula referred to in item (ii) of the preceding paragraph are to be established for each type of unit generating soot or smoke that is associated with nitrogen oxides, as specified by the Minister of the Environment.

(5) If it is difficult for a prefectural governor to abide by the provisions of paragraph (1), the prefectural governor may establish standards regulating the total amount of emissions for nitrogen oxides as separately prescribed by the Minister of the Environment.

(Method of Measurement)

Article 7-5 (1) In applying the standards regulating the total amount of emissions from sulfur oxides, the amount of sulfur oxides is to be measured in the manner prescribed in the remarks of Appended Table 1.

(2) When applying the standards regulating the total amount of emissions from

nitrogen oxides, the relevant person is to measure the amount of nitrogen oxides by first measuring the concentration of nitrogen oxides by the means specified in Japanese Industrial Standard K0104 and measuring the amount of emission gases by the means specified in Japanese Industrial Standard Z8808 and then calculating them; or by the means specified by the Minister of the Environment.

(Calculation of Total Quantity of Designated Soot and Smoke)

Article 7-6 (1) The total quantity prescribed in Article 5-3, paragraph (1), item (iii) of the Act is to be calculated using materials associated with the things set forth in the following items, for the purpose of estimating what the concentration of designated soot and smoke will be if there is no reduction as under the plan for reducing the total quantity of designated soot and smoke after the period for achieving that plan has passed in the designated region based on the air pollution prediction method, and for the purpose of making that concentration of designated soot and smoke in that designated region a concentration that ensures the air environment standards:

- (i) weather conditions such as wind direction and wind velocity;
- (ii) the location of the source generating the designated soot and smoke, the height of the outlet, and other conditions;
- (iii) the status of emission of designated soot and smoke;
- (iv) the status of sources generating designated soot and smoke in areas other than that designated region that effect that designated region, and the emission status;
- (v) other particulars needed to calculate the total quantity of designated soot and smoke.

(2) The air pollution prediction method referred to in the preceding paragraph must be a method that makes the relationship between the emission of designated soot and smoke and the atmospheric air pollution due to designated soot and smoke scientifically and reasonably clear by employing theoretical calculation based on the atmospheric air diffusion formula using computers and other devices, or conducting experiments using models and other equipment, and the method must be one that has been verified as being used to estimate air pollution that matches to a considerable extent when checked against the air pollution actually measured.

(Filing a Notification of the Installation of a Facility Generating Soot or Smoke)

Article 8 (1) The relevant person must file a notification under the provisions of Article 6, paragraph (1), Article 7, paragraph (1), or Article 8, paragraph (1) of the Act using a written notification based on Form 1.

- (2) The particulars specified by Order of the Ministry of the Environment referred to in Article 6, paragraph (2) of the Act (including as applied mutatis mutandis pursuant to Article 7, paragraph (2), and Article 8, paragraph (2) of the Act) are as follows:
- (i) how the soot or smoke is emitted;
  - (ii) the installation site of the unit generating soot or smoke and the soot or smoke processing unit;
  - (iii) an outline of operation system associated with the generation of soot or smoke and the processing of soot or smoke;
  - (iv) if the smoke duct is equipped with a measurement point for emission gases, its location; and
  - (v) emergency contact telephone numbers and other means of contact in the event of an emergency.

(Filing a Notification of the Installation of a Unit Emitting a Volatile Organic Compounds)

Article 9 (1) The relevant person must file the notification under the provisions of Article 17-5, paragraph (1), Article 17-6, paragraphs (1), and Article 17-7, paragraph (1) of the Act using a written notification based on Form 2.

- (2) The particulars specified by Order of the Ministry of the Environment referred to in Article 17-5, paragraph (2) of the Act (including as applied mutatis mutandis pursuant to Article 17-6, paragraph (2), and Article 17-7, paragraph (2) of the Act) are as follows:
- (i) how the volatile organic compound is emitted
  - (ii) the installation site of the unit emitting a volatile organic compound and the volatile organic compounds processing unit;
  - (iii) an outline of the operation system associated with the generation of the volatile organic compound and the treatment of the volatile organic compounds;
  - (iv) if the emission gases duct is equipped with a measurement point for emission gases, its location; and
  - (v) emergency contact telephone numbers and other means of contact in the event of an emergency.

(Filing a Notification of the Installation of a Unit Generating Ordinary Particulates)

Article 10 (1) The relevant person must file a notification under the provisions of Article 18, paragraphs (1) and (3), and Article 18-2, paragraph (1) of the Act using a written notification based on Form 3.

- (2) The following documents must be attached to the notification in the preceding paragraph made under the provisions of Article 18, paragraph 2 of the Act

(including when applied mutatis mutandis pursuant to Article 18-2, paragraph (2) of the Act).

- (i) the layout plan of the unit generating ordinary particulates;
- (ii) the layout plan of the unit whose purpose is to process ordinary particulates or to prevent ordinary particulates from scattering;
- (iii) a document explaining an outline of the operation system associated with the generation of ordinary particulates and processing of ordinary particulates.

(Filing a Notification of the Installation of a Unit Generating Specified Particulates)

Article 10-2 (1) The relevant person must file a notification under the provisions of Article 18-6, paragraphs (1) and (3), and Article 18-7, paragraph (1) of the Act using a written notification based on Form 3-2.

(2) The particulars specified by Order of the Ministry of the Environment referred to in Article 18-6, paragraph (2) of the Act (including as applied mutatis mutandis pursuant to Article 18-6, paragraph (4), and Article 18-7, paragraph (2)) are as follows:

- (i) a layout plan of a unit generating specified particulates;
- (ii) how the specified particulates are emitted;
- (iii) the location of the unit whose purpose is to process specified particulates or to prevent specified particulates from scattering;
- (iv) an outline of the operation system associated with the generation of specified particulates and the processing of specified particulates;
- (v) conditions in the vicinity of the factory or place of business where the unit generating specified particulates is installed;
- (vi) the location for measuring the concentration of specified particulates under the provisions of Article 18-12 of the Act, and the reason for having chosen that measurement location.

Article 10-3 Deleted

(Filing a Notification of the Implementation of Work Emitting or Dispersing Specified Particulates)

Article 10-4 (1) . The relevant person must file a notification under the provisions of Article 18-17, paragraphs (1) and (2) of the Act using a written notification based on Form 3-5.

(2) The particulars specified by Order of the Ministry of the Environment that are referred to in Article 18-17, paragraph (3) of the Act are as follows:

- (i) an outline, layout plan, and conditions in the vicinity of the building or other such structure involved in the work emitting or dispersing specified

- particulates;
- (ii) an outline of specified construction work schedule that clearly indicates the schedule for work emitting or dispersing specified particulates;
  - (iii) the name and contact address of the person in charge of the site where the prime contractor or initiating builder is conducting the specified construction work
  - (iv) if a subcontractor is implementing the work emitting or dispersing specified particulates, the name and contact address of the person in charge of the site affiliated with the subcontractor.

(Filing a Notification of the Installation of a Unit Emitting Mercury)

- Article 10-5 (1) The relevant person must file the notification under the provisions of Article 18-23, paragraph (1), Article 18-24, paragraphs (1), or Article 18-25, paragraph (1) of the Act using a written notification based on Form 3-5.
- (2) The particulars specified by Order of the Ministry of the Environment that are referred to in Article 18-23, paragraph (2) of the Act (including as applied *mutatis mutandis* pursuant to Article 18-24, paragraph (2), and Article 18-25, paragraph (2)) are as follows:
- (i) how the mercury and mercury compounds are emitted;
  - (ii) the installation site of the unit emitting mercury and the mercury and mercury compounds processing unit;
  - (iii) an outline of the operation system associated with the discharge of mercury and mercury compounds and the processing of mercury and mercury compounds;
  - (iv) if the smoke duct is equipped with a measurement point for exhaust gases, its location; and
  - (v) emergency contact telephone numbers and other means of contact in the event of an emergency.
- (3) Notwithstanding the provisions of the preceding paragraph, if a person that is to file a notification pursuant to the provisions of Article 18-28, paragraph (1), Article 18-29, paragraph (1), or Article 18-30, paragraph (1) of the Act files a notification pursuant to the provisions of Article 6, paragraph (1), Article 7, paragraph (1), or Article 8, paragraph (1) of the Act for a unit emitting mercury to which the previously-filed notification pertains, the prefectural governor or the city mayor prescribed in Article 13 of the Order may allow that person to file the date of the notification based on Form 1 in place of all or part of documents stating the particulars set forth in items (i) through (v) of the preceding paragraph.

(Written Receipt of a Notification of the Installation of a Unit Emitting

Mercury)

Article 10-6 Having accepted a notification referred to in Article 18-23, paragraph (1), Article 18-24, paragraph (1), or Article 18-25, paragraph (1) of the Act, the prefectural governor or the mayor of a city provided for in Article 13 of the Order is to deliver a written receipt based on Form 3-6 to the person that filed the notification.

(Filing a Notification of a Name Change)

Article 11 The relevant person must file the notification under the provisions of Article 11 of the Act (including as applied *mutatis mutandis* pursuant to Article 17-13, paragraph (2), Article 18-13, paragraph (2), and Article 18-31, paragraph (2) of the Act) using a written notification based on Form 4 in the case of a change in particulars set forth in Article 6, paragraph (1), item (i) or (ii) of the Act, or based on Form 5 in the case of discontinuance of use of a unit.

(Filing a Notification of Succession)

Article 12 The relevant person must file a notification under the provisions of Article 12, paragraph (3) of the Act (including as applied *mutatis mutandis* pursuant to Article 17-13, paragraph (2), Article 18-13, paragraph (2), and Article 18-31, paragraph (2) of the Act) using a written notification based on Form 6.

(Number of Submitted Copies of a Written Notification)

Article 13 (1) The relevant person must file the notification under the provisions of the Act using the original copy of the written notification accompanied by one copy thereof.

(2) A notification under the provisions of the Act that concerns more than one unit generating soot or smoke, a notification under the provisions of the Act that concerns more than one unit emitting a volatile organic compound, a notification under the provisions of the Act concerning more than one unit generating ordinary particulates, or a notification under the provisions of the Act concerning more than one unit emitting mercury may be filed using a single written notification for each type of unit, but only if the relevant units generating soot or smoke, units emitting a volatile organic compound, units generating ordinary particulates, or units emitting mercury have been installed in the same factory or place of business and are of the same type (meaning a category referred to in Appended Table 1 of the Order, Appended Table 1-2 of the Order, Appended Table 2 of the Order, or Appended Table 3-3 of the Order).

(3) A notification under the provisions of the Act that concerns more than one unit generating specified particulates may be filed using a single written



notification, but only if those units generating specified particulates are installed in the same factory or place of business.

- (4) A notification under the provisions of the Act that concerns more than one project of work emitting or dispersing specified particulates may be filed using a single written notification, but only if those projects of work emitting or dispersing specified particulates are conducted for the same building or other such structure or are conducted in the same factory or place of business.

(Use of Optical Disks to Carry Out Procedures)

Article 13-2 Notifications and attached documents under the provisions of Article 8, paragraph (1), Article 9, paragraph (1), Article 10, paragraph (1), Article 10-2, paragraph (1), Article 10-4, paragraph (1), Article 10-5, paragraph (1), Article 11, Article 12, and Article 16-11, paragraph (4) (hereinafter referred to as "written notifications, etc." in this Article) may be submitted using optical disks clearly labeled with the items in the written notifications, etc. concerned and an optical disk submission document based on Form 6-2.

(Structure of Optical Disks)

Article 13-3 An optical disk as referred to in the preceding Article must fall under one of the following items:

- (i) a 120mm optical disc conforming to JIS X0606 and X6282 or X0606 and X6283
- (ii) a 120mm optical disc conforming to JIS X0609 or X0611 and X6248 or X6249

(Types of Fuel)

Article 14 Types of fuel specified by Order of the Ministry of the Environment referred to in Article 15, paragraph (3), and Article 15-2, paragraph (3) of the Act are heavy oil and other petroleum fuel.

(Measurement of Amounts and Concentrations of Soot and Smoke)

Article 15 (1) A measurement of the amount of soot or smoke or the concentration of soot or smoke under the provisions of Article 16 of the Act is to have as its subject soot or smoke for which an emission standard as referred to in Article 3, paragraph (1) or (3) of the Act or a standard regulating the total amount of emissions as referred to in Article 5-2, paragraph (1) or (3) of the Act has been established, in accordance with the provisions of the following items:

- (i) for a unit generating soot or smoke that generates and emits into the air from an outlet 10 or more cubic meters per hour of soot or smoke, calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, a measurement of the amount of soot or smoke

- associated with sulfur oxides is to be taken at least once every work period not exceeding two months (or at all times for a unit generating soot or smoke (limited to one installed in a specified factory or place of business) which emits soot or smoke of at least the amount specified by the Minister of the Environment into the air from an outlet) using a method for measuring the amount of soot and smoke associated with sulfur oxides as set forth in the remarks of Appended Table 1;
- (ii) a measurement of the concentration of soot and smoke associated with soot or dust is to be taken using the measurement method set forth in the remarks of Appended Table 2 at the frequency set forth in (a) through (c) for the unit generating soot or smoke set forth therein:
    - (a) units generating soot and smoke set forth in rows 1, 56 and 58 of Appended Table 2 and gasification furnaces as set forth in row 7 of that table that are steam reforming-type reformers with a hydrogen manufacturing capacity, under conditions of a zero-degree temperature and one atmosphere of pressure, of less than 1,000 cubic meters per hour (limited to one using only fuel and raw materials in the form of gas) and fuel cell reformers: at least once every five years
    - (b) units generating soot and smoke that generate and emit into the air from an outlet an amount of emission gases that is less than 40,000 cubic meters per hour (excluding a unit generating soot or smoke set forth in (a) above and waste incinerators set forth in row 36 of Appended Table 2), and waste incinerators set forth in row 36 with an incineration capacity of less than 4,000 kilograms per hour: at least twice a year (or at least once a year for a unit generating soot or smoke that undergoes a continuous suspension of service for six months or more in one year (including any period of suspension in the preceding fiscal year, if a unit continues to be under a suspension of service that began in the preceding fiscal year and the period of suspension in the preceding fiscal year is less than six months));
    - (c) a unit generating soot or smoke other than as set forth in (a) and (b) above: at least once every work period not exceeding two months.
  - (iii) a measurement of the concentration of soot or smoke associated with a hazardous substance set forth in Article 1, items (i) through (iv) of the Order is taken by the measurement method set forth in the remarks of Appended Table 3, at least once every work period not exceeding two months (or at least twice a year for a unit generating soot or smoke that generates and emits into the air from an outlet an amount of emission gases that is less than 40,000 cubic meters per hour (or at least once a year, for a unit generating soot or smoke that undergoes a continuous suspension of service for six months or more in one year (including any period of suspension in the preceding fiscal year, if a unit continues to be under a suspension of service

- that began in the preceding fiscal year and the period of suspension in the preceding fiscal year is less than six months));
- (iv) a measurement of the amount of soot or smoke associated with nitrogen oxides is taken by the measurement method set forth in the remarks of Appended Table 3-2 (or by either that method or the measurement method specified by the Minister of the Environment, for a unit generating soot or smoke as set forth in (ii)), at the frequency set forth in the relevant of (a) through (d) for the unit generating soot or smoke set forth therein; provided, however, that this may be done as specified by the Minister of the Environment for a unit generating soot or smoke installed in a specified factory or place of business in a case specified by the Minister of Environment, such as when emission gas systems in the specified factory or place of business are integrated at an outlet:
    - (a) a unit set forth in row 4 of Appended Table 3-2 that is a steam reforming-type reformer with a hydrogen manufacturing capacity, under conditions of a zero-degree temperature and one atmosphere of pressure, of less than 1,000 cubic meters per hour (limited to one using only fuel and raw materials in the form of gas) and fuel cell reformers: at least once every five years;
    - (b) a unit generating soot or smoke that generates and emits into the air from an outlet an amount of emission gases that is less than 40,000 cubic meters per hour (excluding a unit generating soot or smoke set forth in (a) above): at least twice a year (or at least once a year for a unit generating soot or smoke that undergoes a continuous suspension of service for six months or more in one year (including any period of suspension in the preceding fiscal year, if a unit continues to be under a suspension of service that began in the preceding fiscal year and the period of that suspension in the preceding fiscal year is less than six months));
    - (c) a unit generating soot or smoke other than those set forth in (a), (b) or (d) above: at least once every work period not exceeding two months;
    - (d) a unit generating soot or smoke that generates and emits into the air from an outlet an amount of emission gases that is less than 40,000 cubic meters per hour (limited to one installed in a specified factory or place of business, and excluding a unit generating soot or smoke set forth in (a)): at all times.
- (2) The results of measurement of the amount of soot and smoke or the concentration of soot and smoke under the provisions of Article 16 of the Act are to be recorded as provided in the following items:
- (i) the results of the measurements referred to in the items of the preceding paragraph (excluding the constant measuring referred to in the items (i) through (iv)) are recorded in a record sheet for measurements of soot and

smoke amounts and concentrations based on Form 7 and that record sheet is preserved for three years; provided, however, that if the person in question has been delivered a certificate prescribed in Article 110-2 of the Measurement Act (Act No.51 of 1992) indicating that it certifies the name of the measurer, date of measurement, measurement points, measurement method, and results of the measurement of the concentration of soot or smoke from a person registered as referred to in Article 107 of that Act, the entries in the certificate may be used in place of the record in the record sheet for measurements of soot and smoke amounts and concentrations based on Form 7;

- (ii) the results of the constant measuring referred to in the items (i) through (iv) of the preceding paragraph are recorded with a clearly stated date of measurement, measurement points, measurement method, and status of use of the unit generating soot or smoke, and the record is preserved for three years.

(Volatile Organic Compound Emissions Standards)

Article 15-2 The volatile organic compound emission standard under the provisions of Article 17-4 of the Act is that the concentration of volatile organic compounds measured by the measurement method specified by the Minister of the Environment is the amount of volatile organic compounds per cubic meter of emission gases (as converted into the capacity of 1C volatile organic compounds) set forth in the right-hand column of row 2 of Appended Table 5 by type of unit set forth in the middle column of that table.

(Measurement of Concentrations of Volatile Organic Compounds)

Article 15-3 The measurement of the concentration of volatile organic compounds and the recording of the results thereof under the provisions of Article 17-12 of the Act is done as provided in the following items:

- (i) the measurement of the concentration of volatile organic compounds is done by the measurement method specified by the Minister of the Environment at least once a year;
- (ii) the results of the measurement specified in the preceding item are recorded with a clearly stated time and date of measurement, measurer, measurement points, measurement method, and status of use of the unit emitting a volatile organic compound, and the record is preserved for three years.

(Standards for Structure of a Unit Generating Ordinary Particulates)

Article 16 The standards for structure and use and management specified by Order of the Ministry of the Environment referred to in Article 18-3 of the Act are as set forth in the right-hand column of Appended Table 6 by type of unit

set forth in the middle column of that table.

(Site Boundary Standards)

Article 16-2 The site boundary standards referred to in Article 18-5 of the Act for asbestos are that the concentration of asbestos in the air measured by the measurement method specified by the Minister of the Environment is ten fibers per liter.

(Measurement of Specified Particulate Concentrations)

Article 16-3 The measurement of the concentration of specified particulates and the recording of the results thereof under the provisions of Article 18-12 of the Act is done as provided in the following items:

- (i) the measurement of the concentration of specified particulates associated with asbestos is done by the measurement method specified by the Minister of the Environment at least once every work period not exceeding six months; provided, however, that the Minister of the Environment may establish other provisions on the frequency of measurement based on things such as the size of a factory or place of business of the specified particulates emitter;
- (ii) the results of the measurement specified in the preceding item are recorded with a clearly stated time and date of measurement, weather, measurer, measurement points, measurement method, and status of use of the unit generating specified particulates, and the record is preserved for three years.

(Work Standards)

Article 16-4 The standards referred to in Article 18-14 of the Act for asbestos are as follows:

- (i) the prime contractor or initiating builder of the specified construction work must create a plan for the work emitting or dispersing specified particulates listing the following particulars before commencing the work emitting or dispersing specified particulates in the specified construction work, and carry out the work emitting or dispersing specified particulates in accordance with the plan.
  - (a) the name(s) and address(es) of the person(s), as well as the name(s) of the representative(s), if the person(s) are corporation(s) who are the original orderer of that specified construction work;
  - (b) the location of that specified construction work;
  - (c) the type of work emitting or dispersing specified particulates;
  - (d) the implementation period for work emitting or dispersing specified particulates;
  - (e) the types of specified building materials used in the parts of the building or other such structure that will be subject to work emitting or dispersing

- specified particulates, as well as the locations and the size of the area where the specified building materials are used;
- (f) the way in which work emitting or dispersing specified particulates will be carried out; and
  - (g) the items set forth in the items of Article 10-4, paragraph (2)
- (ii) when carrying out the work emitting or dispersing specified particulates in the specified construction work, the prime contractor or initiating builder of the specified construction work must install a bulletin board meeting the following requirements in a location that makes it easy for the public to see.
- (a) being at least 42.0 centimeters in length and 29.7 centimeters in width or at least 29.7 centimeters in length and 42.0 centimeters in width; and
  - (b) displaying the following matters:
    - 1. the name(s) and address(es) of the person(s), as well as the name(s) of the representative(s), if the person(s) are corporation(s) who are the original orderer and prime contractor or the initiating builder of that specified construction work;
    - 2. when the specified construction work constitutes specified construction work subject to notification, the date and destination of the notification under Article 18-17, paragraphs (1) and (2) of the Act; a
    - 3. the items set forth in Article 10-4, paragraph (2), item (iii) as well as in (d) and (f) above
- (iii) the prime contractor, initiating builders, and subcontractors of the specified construction work must, in a fashion suited to how the specified construction work is divided up, record the implementation status of the work emitting or dispersing specified particulates in the specified construction work (when carrying out work set forth in the middle column of Appended Table 7-1 and work listed in the right-hand column of 7-6 (a) and (c), the checking results, method, and date as provided for in the right-hand column of the same Table 7-1 (c), (d), (f), and (g) (including the details therein if any repair or other measures have been taken based on the result of the confirmation), and the name of the person who did the checking) and retain the records until the specified construction work is completed.
- (iv) the prime contractor of the specified construction work must use the records created by the various subcontractors as set forth in the item above to confirm that the work emitting or dispersing specified particulates in the specified construction work is being carried out appropriately based on the plan as set forth in (i) above.
- (v) the prime contractor or initiating builder of the specified construction work must, after the removal, enclosure, or containment of specified building materials in the specified construction work (hereinafter referred to as the "removal, etc." in this item) has been completed (when the location where the

removal, etc. is conducted is isolated from other places, before the isolation is lifted), have people with the necessary knowledge conduct the relevant checks visually to appropriately confirm that the removal, etc. has been completed. However, individuals who are the initiating builder of the construction work involving demolition, remodeling, or renovation (excluding people carrying out construction work involving demolition, remodeling, or renovation on a commercial basis) may conduct the relevant confirmation themselves when carrying out minor construction work involving only extremely small amounts of particulate emission or dispersal when remodeling or renovating buildings or other such structures.

(vi) beyond what is provided for in the preceding items, the standards are as set forth in the right-hand column of Appended Table 7 by type of work set forth in the middle column of that table.

o (Methods of Investigation for Construction Work involving Demolition, Remodeling, or Renovation)

Article 16-5 The methods specified by Order of the Ministry of the Environment that are referred to in Article 18-15, paragraph (1) of the Act are as follows:

(i) investigation using the drawings and specifications as well as other documents, and conducting a visual inspection as to the presence or absence of specified building materials. However, this shall not apply when it is clear from the drawings and specifications as well as other documents that the construction work involving demolition, remodeling, or renovation constitutes construction work involves the work of demolishing, remodeling, or renovating a building or other such structure as listed as follows, and work demolishing, remodeling, or renovating a building or other such structure other than the building or other such structure concerned is not involved.

(a) a building or other such structure whose construction began after September 1, 2006 (excluding those listed in (b) to (e));

(b) equipment (including piping; the same applies hereinafter in this item) in facilities provided for the use of non-ferrous metal manufacturing industry whose construction began after September 1, 2006, to whose connections gaskets were installed after October 1, 2007;

(c) equipment in facilities provided for the use of the steel industry whose construction began after September 1, 2006, to whose connections gaskets and gland packing were installed after April 1, 2009;

(d) equipment in facilities provided for the use of the chemical industry whose construction began after September 1, 2006, to whose connections gland packing was installed after March 1, 2011; and

(e) equipment in facilities provided for the use of the chemical industry

whose construction began after September 1, 2006, to whose connections gaskets were installed after March 1, 2012

- (ii) the inspections provided for in the previous item regarding construction work that involves the work of demolishing, remodeling, or renovating a building (excepting where specified in the provisos to the preceding item) must be entrusted to people specified by the Minister of the Environment as having the necessary knowledge to carry out the inspections concerned appropriately. However, individuals who are the initiating builder of the construction work involving demolition, remodeling, or renovation (excluding people carrying out construction work involving demolition, remodeling, or renovation on a commercial basis) may conduct the relevant inspections themselves when carrying out minor construction work involving only extremely small amounts of particulate emission or dispersal when remodeling or renovating buildings.
- (iii) inspections by analysis must be carried out when it becomes unclear based on the inspections as set forth in (i) above if the construction work involving demolition, remodeling, or renovation constitutes specified construction work or not. However, this shall not apply when measures relating to specified construction work are taken based on the Act or a related order deeming that that construction work involving demolition, remodeling, or renovation constitutes specified construction work.

(Timing of the Explanation for Construction Work Involving Demolition, Remodeling, or Renovation)

Article 16-6 An explanation under the provisions of Article 18-15, paragraph (1) of the Act is to be given by the day on which the construction work involving demolition, remodeling, or renovation starts (if that construction work involving demolition, remodeling, or renovation constitutes specified construction work subject to notification, and work emitting or dispersing specified particulates is to start within 14 days from the day on which that specified construction work subject to notification starts, this means by 14 days before the day on which the work emitting or dispersing specified particulates starts) However, this does not apply if it is necessary to urgently conduct work emitting or dispersing specified particulates due to a disaster or other emergency situation.

(Particulars to Be Explained for Construction Work Involving Demolition, Remodeling, or Renovation)

Article 16-7 The items specified by Order of the Ministry of the Environment that are referred to in Article 18-15, paragraph (1), item (iv) of the Act are as follows:



- (i) the date on which the investigation as set forth in Article 18-15, paragraph (1) or paragraph (4) of the Act (hereinafter referred to as the "preliminary investigation") is completed
- (ii) the methods of preliminary investigation
- (iii) items clarifying the names of the people carrying out the investigation as set forth in Article 16-5, paragraph (2) and that they satisfy the conditions of being people specified by the Minister of the Environment as set forth in the same item
- (iv) the items set forth in Article 10-4, paragraph (2), items (ii) and (iii) when the construction work involving demolition, remodeling, or renovation constitutes specified construction work other than specified construction work subject to notification
- (v) the items set forth in the items of Article 10-4, paragraph (2) when the construction work involving demolition, remodeling, or renovation constitutes specified construction work subject to notification

(Records etc. Related to Investigations Concerning Construction Work involving Demolition, Remodeling, or Renovation)

Article 16-8 (1) The records as set forth in Article 18-15, paragraphs (3) and (4) of the Act must be created for the following items (when buildings and other such structures associated with construction work involving demolition, remodeling, and renovation correspond with any of the items listed in Article 16-5, (i), (a) to (e), then limited to the items listed in (i) to (v)) and retained for three years from the date that the construction work involving demolition, remodeling, or renovation is completed.

- (i) the name(s) and address(es) of the person(s), as well as the name(s) of the representative(s), if the person(s) are corporation(s) who are the original orderer of that construction work involving demolition, remodeling, or renovation
- (ii) the location of the construction work involving demolition, remodeling, or renovation
- (iii) the name and overview of the construction work involving demolition, remodeling, or renovation
- (iv) the items listed in (i) and (ii) of the preceding Article
- (v) the date on which construction of the buildings and other such structures associated with construction work involving demolition, remodeling, and renovation began (when buildings and other such structures associated with construction work involving demolition, remodeling, and renovation correspond with any of the items listed in Article 16-5, (i), (b) to (e), then in addition, the date on which the building materials specified in these provisions were installed)

- (vi) an overview of the buildings and other such structures associated with construction work involving demolition, remodeling, and renovation
  - (vii) the portion of the building or other such structure being worked on when the construction work involving demolition, remodeling, or renovation concerned includes work to remodel or renovate a building or other such structure
  - (viii) the names of the people doing the investigation when an investigation as set forth in Article 16-5, paragraph (2) is carried out
  - (ix) when inspection by analysis is carried out, the locations inspected and the name(s) of the people and institution(s) or company(ies) affiliated to who carried out the inspection
  - (x) whether or not the various building materials in the part of the buildings and other such structures associated with construction work involving demolition, remodeling, and renovation constitute specified building materials (when it is deemed that the construction work involving demolition, remodeling, or renovation constitutes specified construction work as set forth in the provisos to Article 16-5 (iii), to that effect) and the grounds for that determination
- (2) When carrying out the investigation as set forth in Article 16-5, paragraph (2), the records in the preceding paragraph must be retained together with copies of documents certifying that the people set forth in item (viii) of the preceding paragraph correspond to people specified by the Minister of the Environment as set forth in Article 16-5, paragraph (2).
- (3) Copies of the documents as set forth in Article 18-15, paragraph (3) of the Act must be retained for three years from the date that the construction work involving demolition, remodeling, or renovation is completed.

(Manner of Posting in Connection with Construction Work Involving Demolition, Remodeling, or Renovation)

Article 16-9 Posting under the provisions of Article 18-15, paragraph (5) of the Act is to be done through the installation of a bulletin board of at least 42.0 centimeters in length and 29.7 centimeters in width or at least 29.7 centimeters in length and 42.0 centimeters in width.

(Particulars to Be Posted for Construction Work Involving Demolition, Remodeling, or Renovation)

Article 16-10 The items specified by Order of the Ministry of the Environment that are referred to in Article 18-15, paragraph (5) of the Act are as follows:

- (i) the name(s) and address(es) of the person(s), as well as the name(s) of the representative(s), if the person(s) are corporation(s) who are the prime contractor or the initiating builder of the construction work involving

- demolition, remodeling, or renovation;
- (ii) the items listed in (i) and (ii) of Article 16-7
- (iii) when the construction work involving demolition, remodeling, or renovation constitutes specified construction work, the types of specified building materials used in the parts of the building or other such structure that will be subject to work emitting or dispersing specified particulates

(Reporting of Investigation Results for Construction Work involving Demolition, Remodeling, or Renovation)

Article 16-11 (1) The reports under Article 18-15, paragraph (6) of the Act shall be made regarding the preliminary investigations about one of the construction work involving demolition, remodeling, or renovation listed as follows:

- (i) construction work involving work to demolish a building where the total floor area of the work subject is at least 80 square meters
  - (ii) construction work involving work to remodel or renovate a building where the total contract charge amount (when the initiating builder of the construction work involving demolition, remodeling, or renovation carries out the work, an amount equivalent to an appropriate contract charge if the work had been contracted out; the same applies in the following item and (v) of the following paragraph.) for the work concerned is at least 1 million yen
  - (iii) construction work that involves the work of demolishing, remodeling, or renovating a structure (limited to cases where the Minister of the Environment has specified that the risk of usage of specified building materials is high) where the total contract charge amount for the work concerned is at least 1 million yen
- (2) The reports as set forth in Article 18-15, paragraph (6) of the Act must be made for the following items (when buildings and other such structures associated with construction work involving demolition, remodeling, and renovation correspond with any of the items listed in Article 16-5, (i), (a) to (e), then limited to the items listed in (i) to (v) (except the items listed in Article 16-7 (iii) and Article 16-8, paragraph (1), (vi) and (ix))).
- (i) the name(s) and address(es) of the person(s), as well as the name(s) of the representative(s), if the person(s) are corporation(s) who are the original orderer and the prime contractor or the initiating builder of the construction work involving demolition, remodeling, or renovation
  - (ii) the items listed in Article 16-7, (i) and (iii) as well as Article 16-8, paragraph (1), (ii), (iii), (v), (vi), and (ix)
  - (iii) the implementation period for the construction work involving demolition, remodeling, or renovation
  - (iv) when the construction work involving demolition, remodeling, or renovation constitutes construction work under item (i) of the preceding

- paragraph, the total floor area of the subject work as provided for in the same item
- (v) when the construction work involving demolition, remodeling, or renovation constitutes construction work under item (ii) or (iii) of the preceding paragraph, the total contract charge amount for the work specified in these provisions
  - (vi) the types of building materials in the parts of the buildings and other such structures associated with construction work involving demolition, remodeling, and renovation
  - (vii) whether or not the building materials specified in the preceding item constitute specified building materials (when it is deemed that the construction work involving demolition, remodeling, or renovation constitutes specified construction work as set forth in the provisos to Article 16-5 (iii), to that effect) and an overview of the grounds for that determination when not so constituted
  - (viii) when the construction work involving demolition, remodeling, or renovation constitutes specified construction work, the timing at which the work emitting or dispersing specified particulates in the specified construction work begins
- (3) When the same person divides the construction work involving demolition, remodeling, and renovation of the buildings and other such structures into at least two contracts for commissioning, it is deemed to have been commissioned as one contract and the provisions of paragraph (1) applied.
- (4) The reports as set forth in Article 18-15, paragraph (6) of the Act shall be made by a method pursuant to the provisions of Article 6, paragraph (1) of the Act on the Advancement of Government Administration Processes That Use Information and Communications Technology (Act No. 151 of 2002) using electronic data processing systems (meaning the electronic data processing systems specified in that paragraph; the same applies hereinafter in this paragraph). However, when the use of electronic data processing systems is difficult, a report based on Form 3-4 may be used in their place to carry out reporting.

(Particulars to Be Explained to Subcontractors)

Article 16-12 The particulars specified by Order of the Ministry of the Environment stipulated in Article 18-16, paragraph (3) of the Act shall be the items listed in Article 10-4, paragraph (2), item (ii) and Article 16-4, (i), (c) to (e).

(Dust Collector/Exhauster)

Article 16-13 The dust collector/exhauster specified by Order of the Ministry of

the Environment in Article 18-19, (i), (b) of the Act shall include a HEPA filter as prescribed by JIS Z8122.

(Equivalent Methods of Isolation etc.)

Article 16-14 The methods specified by Order of the Ministry of the Environment that are referred to in Article 18-19, (i), (c) of the Act shall be methods with an effect equal to or greater than the methods specified in (b) of the same item.

(Methods of Covering or Adhering)

Article 16-15 The methods specified by Order of the Ministry of the Environment that are referred to in Article 18-19, (ii) of the Act shall be methods which enclose or contain (hereinafter referred to as "enclosure, etc.") specified building materials. However, when carrying out the enclosure of spray-applied asbestos or the enclosure, etc. of asbestos-containing insulation materials, thermal insulating materials, and fireproof covering materials (excluding spray-applied asbestos; hereinafter referred to as "asbestos-containing insulation materials, etc.") (limited to where the cutting, crushing, etc. of these building materials is involved) or the containment of spray-applied asbestos, the place where the enclosure, etc. of those specified building materials is being carried out must be isolated from other places, and a dust collector/exhauster specified in Article 16-13 must be used in the isolated place concerned while the enclosure, etc. is being carried out.

(Reporting Results etc. of the Work Emitting or Dispersing Specified Particulates)

Article 16-16 (1) The reports under Article 18-23, paragraph (1) of the Act shall be made regarding the following items:

- (i) the date on which the work emitting or dispersing specified particulates was completed
- (ii) an overview of the implementation status of the work emitting or dispersing specified particulates
- (iii) items clarifying the names of the people carrying out the checking as set forth in Article 16-4, (v) and that the said people have the necessary knowledge to conduct the relevant checks appropriately

(2) The records as set forth in Article 18-23, paragraph (1) of the Act must be created regarding the particulars set forth in the items below and retained for three years from the date that the specified construction work is completed, together with copies of the documents set forth in the same paragraph as well as copies of documents certifying that the people carrying out the checking as set forth in Article 16-4, (v) have the necessary knowledge to conduct the relevant checks appropriately.

- (i) the items set forth in Article 10-4, paragraph (2), items (iii) and (iv) as well as in Article 16-4, (i), (a) to (c)
- (ii) the implementation period for work emitting or dispersing specified particulates
- (iii) the implementation status of the work emitting or dispersing specified particulates (including the following matters)
  - (a) the checking date and results as provided for in Article 16-4, (v) (including the details therein if any measures such as removal etc. of the specified building materials have been made based on the result of the confirmation), and the name of the person who did the checking
  - (b) when work has been carried out as set forth in the middle column of Appended Table 7-1 and work listed in the right-hand column of 7-6 (a) and (c), the checking results, method, and date as provided for in the right-hand column of the same Table 7-1 (c), (d), (f), and (g) (including the details therein if any repair or other measures have been taken based on the result of the confirmation), and the name of the person who did the checking

(Records Relating to Work Emitting or Dispersing Specified Particulates)

Article 16-17 The records as set forth in Article 18-23, paragraph (2) of the Act must be created regarding the particulars set forth in the items of paragraph (2) of the previous Article and retained for three years from the date that the specified construction work is completed as well as copies of documents certifying that the people carrying out the checking as set forth in Article 16-4, (v) have the necessary knowledge to conduct the relevant checks appropriately (as set forth in the provisos of the same item, excluding when individuals who are the initiating builder of the construction work involving demolition, remodeling, or renovation have conducted the relevant checks themselves).

(Mercury and Mercury Compound Emissions Standards)

Article 16-18 (1) The emission standard for mercury and mercury compounds under the provisions of Article 18-27 of the Act is that the mercury concentration (meaning the total of the concentration of gaseous mercury (gaseous mercury means mercury and mercury compounds in the form of gas contained in emission gases; the same applies hereafter) (concentration of gaseous mercury means the concentration of gaseous mercury measured by the measurement method specified by the Minister of the Environment, calculated as the concentration per cubic meter of emission gasses calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere; the same applies hereafter) and the concentration of particulate mercury (particulate mercury means mercury and mercury

compounds contained in dust in emission gas; the same applies hereafter) (concentration of particulate mercury means the concentration of particulate mercury measured by the measurement method specified by the Minister of the Environment, calculated as the concentration per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere; the same applies hereafter)) is the amount of mercury and mercury compounds set forth in the right-hand column of Appended Table 3-3 per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit and scale set forth in the middle column of that table.

- (2) If a unit emitting mercury meets one of the following requirements for three consecutive years, the fact that the unit's concentration of gaseous mercury meets the emission standard provided for in the preceding paragraph may be used to deem the unit to be meeting the emission standard for that unit (but only if no notification of changes in structure under the provisions of Article 18-25 of the Act is given for that unit during that period):
- (i) the concentration of particulate mercury is less than the lower limit of quantitation for the sample gas of gaseous mercury;
  - (ii) the yearly average of the results of measurements referred to in item (i), (a) through (d) of the following Article (if remeasurement under the provisions of item (iii) is done, this means the results of measurement under item (iv) of that Article) is less than 50 micrograms per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, and the concentration of particulate mercury accounts for less than five percent of the mercury concentration;
  - (iii) the yearly average of the results of measurements referred to in item (i), (a) through (d) of the following Article (if remeasurement under the provisions of item (iii) of that Article is done, this means the results of measurement under item (iv) of that Article) is 50 micrograms or more per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, but the concentration of particulate mercury accounts for less than five percent of the mercury concentration, and the amount of particulate mercury is less than 2.5 microgram per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere.

(Measurement of Mercury Concentration)

Article 16-19 The measurement of the mercury concentration and recording of

the results thereof under the provisions of Article 18-35 of the Act is done as prescribed in the following items:

- (i) mercury concentration is measured under normal operation and emission conditions, by the measurement method specified by the Minister of the Environment, at the frequency set forth in (a) through (d) for a unit emitting mercury as set forth therein:
  - (a) a unit emitting mercury that generates and emits into the air from an outlet an amount of emission gases that is 40,000 or more cubic meters per hour (excluding those set forth in (c) and (d)): at least once every work period not exceeding four months;
  - (b) a unit emitting mercury that generates and emits into the air from an outlet an amount of emission gases that is less than 40,000 cubic meters per hour (other than one also set forth in (c) and (d)): at least once every work period not exceeding six months;
  - (c) a unit emitting mercury set forth in row 3 or 4 of Appended Table 3-3 that is a drying furnace using only copper, lead or zinc as raw materials: at least once a year;
  - (d) a unit emitting mercury set forth in row 5 of Appended Table 3-3 that is a melting furnace using only waste lead battery or waste solder as raw materials: at least once a year.
- (ii) for a unit to which the provisions paragraph (2) of the preceding Article apply, particulate mercury is not required to be measured in the measurement set forth in the preceding item, (a) through (d) (hereinafter referred to as the "regular measurement" in this Article); provided, however, that it is confirmed that any of the requirements set forth in items of paragraph (2) of the preceding Article is met, by measuring the concentration of gaseous mercury and particulate mercury at least once every period not exceeding three years.
- (iii) if the result of the regular measurement exceeds the value of the emission standard provided for in paragraph (1) of the preceding Article, a measurement is done under normal operation and emission conditions, three times or more within the period specified in (a) or (b) (hereinafter referred to as "remeasurement" in this Article), and the result thereof is obtained:
  - (a) if the result of the regular measurement exceeds 1.5 times the value of the emission standard: 30 days from the day on which the result of the regular measurement is obtained;
  - (b) in cases other than (a): 60 days from the day on which the result of the regular measurement is obtained;
- (iv) the result of the measurement of mercury concentration when remeasurement is done is the average of all measured values obtained by the regular measurement and the remeasurement, excluding the maximum value



and minimum value; and

- (v) the results of the measurement set forth in the four preceding items are recorded in a record sheet for measurements of mercury concentration based on Form 7-2 and that record sheet is preserved for three years; provided, however, that if the relevant person has been delivered a certificate as referred to in Article 110-2 of the Measurement Act indicating that it certifies the name of the measurer, date of measurement, measurement points, measurement method, and mercury concentration measurement results by a person registered as referred to in Article 107 of that Act, the entries in that certificate may be used in place of the records in the record sheet for measurements of mercury concentration based on Form 7-2.

(Continuous Monitoring by Prefectural Governors)

Article 16-20 (1) The continuous monitoring that the prefectural governors undertake pursuant to the provisions of Article 22, paragraph (1) of the Act is to be done by the prefectural governor's continuously measuring the air pollution status in the prefecture at points where that situation can be reliably assessed.

- (2) The reporting of results that the prefectural governors undertake pursuant to the provisions of Article 22, paragraph (2) of the Act is to be done by the prefectural governor's compiling the results of the continuous monitoring under the provisions of the preceding paragraph and submitting them to the Minister of the Environment by the day specified by the Minister of the Environment.

(Continuous Monitoring by the Minister of the Environment)

Article 16-21 (1) The continuous monitoring that the Minister of the Environment undertakes pursuant to the provisions of Article 22, paragraph (3) of the Act is to be done by the minister's measuring the radioactivity concentration and radiation dose.

- (2) The radioactive materials prescribed by Order of the Ministry of the Environment under Article 22, paragraph (3) of the Act are radioactive materials in the atmosphere.

(Emergencies)

Article 17 (1) The relevant person is to issue an order to emitters of soot and smoke or emitters of volatile organic compounds under the provisions of Article 23, paragraph (2) of the Act while establishing the region in which the measures are found to be necessary and the scope of emitters of soot and smoke or emitters of volatile organic compounds, taking into consideration things such as the status of air pollution, influence of weather conditions, the types

and sizes of units generating soot and smoke or units emitting volatile organic compounds.

- (2) The relevant person is to issue an order as referred to in the preceding paragraph to an emitter of soot or smoke or an emitter of a volatile organic compound through a document giving the substance of the order and other necessary particulars; provided, however, that if it is found to be extremely difficult for a prefectural governor to issue an order using such a document, the prefectural governor may issue an order using the telephone or any other such telecommunications equipment.
- (3) When the relevant person issues an order by a means referred to in the proviso of the preceding paragraph, it must also establish a means for the emitter of soot or smoke or emitter of a volatile organic compound to confirm the existence and the substance of the order and must communicate it to them.
- (4) The provisions of the preceding two paragraphs apply mutatis mutandis to the cancellation of an order as referred to in paragraph (1) that the relevant person has issued without indicating the period during which emergency measures are to be taken.

Article 18 (1) The calculation of hourly value specified by Order of the Ministry of the Environment that is referred to in the Remarks of Appended Table 5 is to be done for materials set forth in the following items, using a measuring instrument set forth in the relevant item to draw in air for one hour continuously:

- (i) sulfur oxides: a sulfur oxides measuring instrument that applies a conductometric method or an ultraviolet fluorescence method;
- (ii) suspended particulate matter: a suspended particulate matter concentration measuring instrument employing light scattering techniques, the piezoelectric mass measurement method, or the beta-ray absorption method;
- (iii) carbon monoxide: a carbon monoxide measuring instrument employing a nondispersive infrared method;
- (iv) nitrogen dioxide: a nitrogen dioxide measuring instrument employing an absorptiometric method using Zalzmann reagent or a chemiluminescent method using ozone;
- (v) oxidant: an oxidant measuring instrument employing an absorptiometric method using neutral phosphate potassium iodide solution with a concentration specified in Japanese Industrial Standard B7957 or a coulometric titration method that is calibrated by the method specified in Japanese Industrial Standard B7957; or an ozone measuring instrument based on an ultraviolet absorption method or a chemiluminescent method using ethylene.

- (2) The scope of suspended particulate matter specified by Order of the Ministry of the Environment that is referred to in the Remarks of Appended Table 5 is suspended particulate matter in the atmosphere with particulates of a diameter of around 10 micrometers or less.
- (3) The scope of oxidant specified by Order of the Ministry of the Environment that is referred to in the Remarks of Appended Table 5 is oxidizer that isolates iodine by reacting with ozone in the atmosphere, peroxyacyl nitrate or potassium iodide.

(Disclosure of Results)

- Article 18-2 (1) The disclosure of the air pollution status that a prefectural governor undertakes pursuant to the provisions of Article 24, paragraph (1) of the Act is to be made using the Internet or by any other such appropriate means.
- (2) The disclosure of the status of the pollution of the air by radioactive materials that the Minister of Health, Labour and Welfare undertakes pursuant to the provisions of Article 24, paragraph (2) of the Act is to be made using the Internet or by any other such appropriate means.

(Identification Cards for On-site Inspections)

Article 19 The format of a certificate under Article 26, paragraph (3) of the Act is as shown based on Form 8.

(Delegation of Authority)

Article 20 The authority of the Minister of the Environment prescribed in Article 26, paragraph (1) and Article 28, paragraph (1) of the Act is delegated to the Director General of the Regional Environment Office; provided, however, that, this does not preclude the Minister of the Environment from being the one to exercise the authority prescribed in Article 26, paragraph (1) of the Act.

(Particulars of Which Mayors of Designated Cities Are to Notify the Prefectural Governor)

Article 21 The particulars specified by Order of the Ministry of the Environment that are referred to in Article 31, paragraph (2) of the Act are the particulars set forth in the following items that a prefectural governor needs to have when establishing or revising the plan for reducing the total quantity of designated soot and the smoke and the standards regulating the total amount of emissions:

- (i) the substance of notifications under the provisions of Articles 6, 7, 8 and 11, and Article 12, paragraph (3) of the Act;
- (ii) the substance of notices under the provisions of Article 27, paragraph (2) of the Act; and

(iii) the status of the pollution of the air by designated soot and smoke.

### **Supplementary Provisions**

- (1) This Ministerial Order comes into effect as from the effective date of the Act Partially Amending the Air Pollution Control Act [Act No. 134 of 1970] (June 24, 1971).
- (2) Until otherwise provided by law, if, at the time this Ministerial Order comes into effect, the same mathematical formula as the mathematical formula for the volume of sulfur oxides prescribed in Article 3 is being used for the emission standard for sulfur oxides in an ordinance or rule of a local government that applies to emitters of soot and smoke and the value (meaning that equivalent to the value in formula K in paragraph (1) of that Article) that the ordinance or rule establishes for an area as set forth in the middle column of Appended Table 1 within the district of that local government is established as being smaller than the value set forth in the right-hand column of that table, the value for "K" in the mathematical formula prescribed in Article 3, paragraph (1) for that area is the value specified in the ordinance or rule.
- (3) The provisions of Article 4 that are applicable to a person that has in place a unit generating soot or smoke at the time this Ministerial Order comes into effect (this includes a person that is doing work on the installation of such a unit at that time; the same applies hereinafter) do not apply until the day set forth in the relevant of the following items for the type of unit set forth in that item, in a case related to Article 13, paragraph (1) of the Act, or until the last day in the one-year period that begins on the effective date of this Ministerial Order, in a case related to Article 14, paragraph (1) of the Act.
  - (i) a unit as set forth in Appended Table 2 (excluding a unit as set forth in the following item): The last day in the two-year period that begins on the effective date of this Ministerial Order
  - (ii) a converter furnace as set forth in row 9, crucible furnace as set forth in row 18, or cement kiln that constitutes a kiln as set forth in row 19 of Appended Table 2: The last day in the three-year period that begins on the effective date of this Ministerial Order
- (4) Prior laws continue to govern an order to improve the structure or way of using a unit generating soot or smoke or the way that soot or smoke generated by a unit generating soot or smoke is processed or to temporarily suspend use of a unit generating soot or smoke that is issued to a person prescribed in the preceding paragraph that has been provided for pursuant to Article 4, paragraph (1) of the Air Pollution Control Act before its amendment by the Act Partially Amending the Air Pollution Control Act (Act No. 134 of 1970), and that is subject to application of the emissions standards for soot and other

particulates referred to in Article 2, paragraph (1) of that Act.

- (5) Prior laws continue to govern the applicability of penal provisions in connection with an order that prior laws are to continue to govern pursuant to the provisions of the preceding paragraph.
- (6) The provisions of Article 5 that are applicable to a person that, at the time this Ministerial Order comes into effect, has in place a unit generating soot or smoke and emits a hazardous substance (excluding chlorine and hydrogen chloride) into the air do not apply until the last day in the one-year period that begins on the effective date of this Ministerial Order, in a case related to Article 13, paragraph (1) and Article 14, paragraph (1) of the Act.

**Supplementary Provisions [Order of the Prime Minister's Office No. 59 of December 25, 1971]**

- (1) This Order of the Prime Minister's Office comes into effect as from January 5, 1972.
- (2) Notwithstanding the provisions of paragraph (2) of the Supplementary Provisions, if the value of K in the mathematical formula prescribed in Article 3, paragraph (1) pursuant to the provisions of paragraph (2) of the Supplementary Provisions of the Regulation for Enforcement of the Air Pollution Control Act (hereinafter referred to as "the Supplementary Provisions") for a region in which the value of K in the mathematical formula is the value specified by ordinance or rule of the local government until otherwise provided for by law, is not smaller than the value that is set forth in the right-hand column of post-amendment Appended Table 1 or Appended Table 1-2 for that region, the value set forth in that right-hand column is used.
- (3) The provisions of the amended Article 3 applicable to a person that has in place a unit generating soot or smoke at the time this Order of the Prime Minister's Office comes into effect (this includes a person that is doing work on the installation of such a unit at that time) do not apply until the day set forth in each of the following items for the unit set forth in that item in a case related to Article 13, paragraph (1) of the Air Pollution Control Act (Act No. 97 of 1968; hereinafter referred to as "the Act"), and prior laws are to continue to govern this; provided, however, that this does not apply to installers of a unit generating soot or smoke in regions set forth in the pre-amendment middle column of Appended Table 1-2 for which the values set forth in the right-hand column of that table are equal to the values set forth in the right-hand column of Appended Table 1.
  - (i) a unit set forth in Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") (excluding a unit as set forth in the following item): March

31, 1972

- (ii) a sintering furnace (or a pellet kiln) set forth in Row 1-3 of the Appended Table to the Cabinet Order: June 30, 1972 (if the actual height of the exhaust outlet of the unit cannot be raised due to the provisions of Article 49, paragraph (1) of the Civil Aeronautics Act (Act No. 231 of 1952 (including as applied mutatis mutandis pursuant to the provisions of Article 107, paragraph (2) of the Self Defense Forces Act (Act No. 165 of 1954)) or Article 56-4, paragraph (1), December 31, 1973)
- (4) The post-amendment provisions of Article 7, paragraph (1) do not apply to a unit generating soot or smoke for which the day following the last day of the period in which a unit generating soot or smoke must not be installed pursuant to the provisions of Article 10, paragraph (1) of the Act (if the period is shortened pursuant to the provisions of paragraph (2) of that Article, that period) (in cases as prescribed by the Electricity Business Act (Act No. 170 of 1964) or the Gas Business Act (Act No. 51 of 1954) equivalent to Article 10, paragraph (1) of the Act pursuant to Article 27, paragraph (2) of the Act, the date on which the construction plan was approved) is before the date on which this Order of the Prime Minister's Office comes into effect.
- (5) The pre-amendment provisions of Article 7, paragraph (1) remain in force for a unit generating soot or smoke as referred to in the preceding paragraph in a region set forth in pre-amendment Appended Table 4.
- (6) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Order of the Prime Minister's Office comes into effect.

**Supplementary Provisions [Order of the Prime Minister's Office No.44 of August 2, 1973]**

- (1) This Order of the Prime Minister's Office comes into effect as of August 10, 1973.
- (2) The post-amendment provisions of Article 5 do not apply a unit as set forth in the middle column from row 1 to row 5 of Appended Table 3-2 that has been installed as of the time of enforcement of this Order of the Prime Minister's Office (including a unit for which installation work is underway at that time and excluding units as prescribed in paragraph (4) of the Supplementary Provisions).
- (3) The post-amendment provisions of Article 5 do not apply to a unit as set forth in the middle column of row 6 of Appended Table 3-2 that has been installed as of the time of enforcement of this Order of the Prime Minister's Office (including a unit for which installation work is underway at that time) until June 30, 1976.

- (4) The post-amendment provisions of Article 5 do not apply to a unit set forth in the middle column of the Appended Table of the Supplementary Provisions that is in place at the time this Order of the Prime Minister's Office comes into effect (including a unit for which installation work is underway at that time) until June 30, 1975.
- (5) Notwithstanding the provisions of post-amendment Article 5, until otherwise provided by law, the emission standard for nitrogen oxides at a unit as prescribed in the preceding paragraph is the volume of nitrogen oxides set forth in the right-hand column of the Appended Table of the Supplementary Provisions per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in the middle column of that table; and that standard applies from July 1, 1975.

Appended Table of the Supplementary Provisions

(i) )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes (the maximum volume of emission gases per hour when calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere; the same applies hereinafter in this Table) of 100,000 cubic meters or more; the same applies hereinafter in this Table) that burn gas	170 cubic centimeters
(i) i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal (limited to those with a calorific value of 5,000 kilocalories or less per kilogram)	750 cubic centimeters
(i) ii )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel (excluding those listed in the preceding row)	600 cubic centimeters
(i) v)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn crude oil tar (excluding those listed in the preceding two rows)	280 cubic centimeters
(v) )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order other than those listed in the preceding four rows	230 cubic centimeters

(v i)	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 40,000 cubic meters or more and excluding heating furnaces for forge welding steel pipes)	220 cubic centimeters
(v ii )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 40,000 cubic meters or more, and excluding cracking furnaces and independent overheating furnaces the manufacture of ethylene, reforming furnaces for the manufacture of methanol, and reforming furnaces for the manufacture of ammonia)	210 cubic centimeters

Remarks

The provisions of Remark 1 and 2 to Appended Table 3-2 apply mutatis mutandis to the volume of nitrogen dioxides listed in the right column of this table. In this case "row 2 and row 5" in Remark 1 of the table is read as "row 2, row 3 and row 7," "row 3" is read as "row 4 and row 5" and "row 4" is read as "row 6."

**Supplementary Provisions [Order of the Prime Minister's Office No.10 of March 26, 1974] [Extract]**

- (1) This Order comes into effect as of April 1, 1974.
- (2) Notwithstanding the provisions of paragraph (2) of the Supplementary Provisions, if the value of K (hereinafter referred to as the "K value") in the mathematical formula prescribed in Article 3, paragraph (1) pursuant to the provisions of paragraph (2) of the Supplementary Provisions of Regulation for Enforcement of the Air Pollution Control Act (hereinafter referred to as "the Supplementary Provisions") for a region in which the K value is to be the value specified in an ordinance or rule of the local government until otherwise provided for by law, is not smaller than the value for that region set forth in the right-hand column of post-amendment Appended Table 1, the value set forth in that right-hand column is used.
- (3) Notwithstanding the provisions of Article 2, paragraph (1) of the Order on Special Measures, the K value for a region where the K value is to be the value specified in the Regulation for Enforcement of the Okinawa Air Pollution Control Act (Regulation No. 35 of 1972) pursuant to the provisions of Article 2, paragraph (1) of the Order of the Prime Minister's Office on Special Measures for the Application of Laws and Regulations Related to the Environmental



Agency Associated with the Reversion of Okinawa (Order of the Prime Minister's Office No.31 of 1972; hereinafter referred to as "Order on Special Measures") until otherwise provided for by law, is 17.5, if the value specified in that Regulation is not smaller than 17. 5.

- (5) The post-amendment provisions of Article 7, paragraph (1) do not apply to a unit generating soot or smoke for which the day following the last day of the period in which a unit generating soot or smoke must not be installed pursuant to the provisions of Article 10, paragraph (1) of the Act (if the period is shortened pursuant to the provisions of paragraph (2) of that Article, that period) (in cases as prescribed by the Electricity Business Act (Act No. 170 of 1964) or the Gas Business Act (Act No. 51 of 1954) equivalent to Article 10, paragraph (1) of the Act pursuant to Article 27, paragraph (2) of the Act, the date on which the construction plan was approved) is before the date on which this Order of the Prime Minister's Office comes into effect.
- (6) The pre-amendment provisions of Article 7, paragraph (1) remain in force for a unit generating soot or smoke in the preceding paragraph in regions set forth in pre-amendment Appended Table 4.
- (7) If the K value associated with the emission standard for sulfur oxides applied to a unit generating soot or smoke prescribed in the preceding paragraph or paragraph (5) of the Supplementary Provisions of the Order of the Prime Minister's Office Partially Amending the Regulation for Enforcement of the Air Pollution Control Act (Order of the Prime Minister's Office No.59 of 1971; hereinafter referred to as "the Amending Order") pursuant to the provisions of the preceding paragraph or paragraph (5) of the Amending Order is larger than the value shown in the right-hand column of the amended Table 1 for an area where a unit generating soot or smoke is installed that is set forth in the middle column of that table, notwithstanding the provisions of the preceding paragraph or paragraph (5) of the Supplementary Provisions of the Amending Order, the emission standard for sulfur oxides applied to the unit generating soot or smoke is the volume of sulfur oxides calculated using the mathematical formula in Article 3, paragraph (1) with the value set forth in the right-hand column as the K value.
- (8) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Order of the Prime Minister's Office comes into effect.

**Supplementary Provisions [Order of the Prime Minister's Office No.71 of November 30, 1974] [Extract]**

- (1) This Order of the Prime Minister's Office comes into effect as of the day of promulgation.

**Supplementary Provisions [Order of the Prime Minister's Office No.33 of  
April 14, 1975]**

- (1) This Order of the Prime Minister's Office comes into effect as of April 15, 1975.
- (2) If the value of K in the mathematical formula prescribed in Article 3, paragraph (1) pursuant to the provisions of paragraph (2) of the Supplementary Provisions of the Regulation for Enforcement of the Air Pollution Control Act (hereinafter referred to as "the Supplementary Provisions" for a region in which the value of K in the mathematical formula is to be the value specified in an ordinance or rule of the local government until otherwise provided for by law is not smaller than the value for that region that is set forth in the right-hand column of post-amendment Appended Table 1, notwithstanding the provisions of paragraph (2) of the Supplementary Provisions, the value set forth in that right-hand column is used.
- (3) If the K value associated with the emission standard for sulfur oxides applied to a unit generating soot or smoke prescribed in paragraph (5) of the Supplementary Provisions of the Order of the Prime Minister's Office Partially Amending the Regulation for Enforcement of the Air Pollution Control Act (Order of the Prime Minister's Office No.59 of 1971; hereinafter referred to as "the Amending Order of 1971"), or paragraph (6) of the Supplementary Provisions of the Order of the Prime Minister's Office Partially Amending the Regulation for Enforcement of the Air Pollution Control Act (Order of the Prime Minister's Office No.10 of 1974; hereinafter referred to as "the Amending Order of 1974") pursuant to the provisions of paragraph (5) of the Amending Order of 1971 or paragraph (6) of the Amending Order of 1974 is larger than the value shown in the right-hand column of the amended Table 1 for the areas where a unit generating soot or smoke is installed set forth in the middle column of that table, notwithstanding the provisions of the preceding paragraph or paragraph (5) of the Supplementary Provisions of the Amending Order of 1971 or paragraph (5) of the Amending Order of 1971 or paragraph (6) of the Amending Order of 1974, the emission standard for sulfur oxides applied to the unit generating soot or smoke is the volume of sulfur oxides calculated using the mathematical formula in Article 3, paragraph (1) with the value set forth in the right-hand column below as the K value.
- (4) The provisions of the amended Appended Table 1 and the preceding two paragraphs applicable to a person that has in place a unit generating soot or smoke at the time this Order of the Prime Minister's Office comes into effect (this includes a person that is doing work on the installation of such a unit at that time) do not apply until the day set forth in each of the following items for

the unit set forth in that items in cases related to the provisions of Article 13, paragraph (1) of the Air Pollution Control Act (Act No. 97 of 1968; hereinafter referred to as "the Act"), and prior laws continue to govern.

- (i) a unit set forth in Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") (excluding the unit set forth from the following item to item (iv)): July 15, 1975
  - (ii) a sintering furnace (or a pellet kiln) as set forth in Row 1-3 of the Appended Table to the Cabinet Order: March 31, 1976 (or March 31, 1977, if the actual height of the exhaust outlet of the unit cannot be raised due to the provisions of Article 49, paragraph (1) of the Civil Aeronautics Act (Act No. 231 of 1952 (including as applied mutatis mutandis pursuant to the provisions of Article 170, paragraph (2) of the Self Defense Forces Act (Act No. 165 of 1954)) or Article 56-4, paragraph (1))
  - (iii) a catalytic regeneration tower, if installation work on a unit to remove sulfur contained in the raw material oil injected into the fluidized catalytic cracker of the catalytic regeneration towers set forth in Table 1-8 of the Cabinet Order is underway at the time this Order of the Prime Minister's Office enters into effect: December 31, 1975 (or the date on which the work is completed, if the work is completed prior to that date)
  - (iv) the unit generating soot or smoke in cases in which installation work on a sulfur oxide processing unit (meaning a unit for processing sulfur oxides that are generated at a unit generating soot or smoke before they are emitted into the atmosphere from an outlet, which has the capability specified by the Commissioner of the Environmental Agency) attached to a unit set forth in Table 1 of the Cabinet Order at the time this Order of the Prime Minister's Office comes into effect (excluding a unit set forth in item (ii)): March 31, 1976 (or the date on which the work is completed, if the work is completed prior to that date)
- (5) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Order of the Prime Minister's Office comes into effect.

**Supplementary Provisions [Order of the Prime Minister's Office No.75 of December 9, 1975]**

- (1) This Order of the Prime Minister's Office comes into effect as of December 10, 1975.
- (2) Until otherwise provided for by law, the provisions of Article 5 do not apply to a unit set forth in the middle column from row 2-1 to row 5-3 and row 7 of Appended Table 3 that has been installed as of the time this Order of the

Prime Minister's Office comes into effect (including a unit for which installation work is underway at that time and excluding a unit prescribed from the following paragraph to paragraph (5) of the Supplementary Provisions).

- (3) Notwithstanding the post-amendment provisions of Appended Table 3-2, until otherwise provided by law, the emission standard for nitrogen oxides at a unit set forth in the middle column of Appended Table 1 of the Supplementary Provisions for which installation work began during the period from August 10, 1973 to the day preceding the effective date of this Order of the Prime Minister's Office is the volume of nitrogen oxides set forth in the right-hand column of Appended Table 1 of the Supplementary Provisions per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in the middle column of that table.
- (4) Notwithstanding the provisions of Appended Table 3-2, until November 30, 1977, the emission standard for nitrogen oxides at a unit set forth in the middle column of Appended Table 2 of the Supplementary Provisions for which installation work was done during the period until August 9, 1973, is the volume of nitrogen oxides set forth in the right-hand column of Appended Table 2 of the Supplementary Provisions per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in the middle column of that table.
- (5) Until November 30, 1977, the provisions of Article 5 do not apply to a unit set forth in the middle column of Appended Table 3 of the Supplementary Provisions that has been installed as of the time this Order of the Prime Minister's Office comes into effect (including a unit for which installation work is underway at that time and excluding one as set forth in the preceding two paragraphs).
- (6) Notwithstanding the post-amendment provisions of Appended Table 3-2, until otherwise provided by law, the emission standard for nitrogen oxides at a unit as provided in the preceding two paragraphs is the volume of nitrogen oxides set forth in the right-hand column of Appended Table 3 of the Supplementary Provisions per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in the middle column of that table; and this applies from December 1, 1977.
- (7) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Order of the Prime Minister's Office comes into effect.

Appended Table 1 of the Supplementary Provisions

(i) )	Boilers listed in row 1 of Appended Table 1 of the Enforcement Order of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") (limited to those that have emission gas volumes (the maximum volume of emission gases per hour when calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere; the same applies hereinafter) of 40,000 cubic meters or more; the same applies hereinafter in this Table) that exclusively burn gas	130 cubic centimeters
(i i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel	480 cubic centimeters
(i ii )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order other than those listed in the preceding two rows	180 cubic centimeters
(i v)	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding heating furnaces for forge welding steel pipes)	200 cubic centimeters
(v )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding cracking furnaces and independent overheating furnaces the manufacture of ethylene, reforming furnaces for the manufacture of methanol, and reforming furnaces for the manufacture of ammonia)	170 cubic centimeters

Remarks

The provisions of remarks 1 and 2 of Appended Table 3-2 shall apply mutatis mutandis to the volume of nitrogen oxides listed in the right column of this Table.

Appended Table 2 of the Supplementary Provisions

(i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 100,000 cubic meters or more; the same applies hereinafter in this Table) that exclusively burn gas	170 cubic centimeters
(i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal (limited to those with a calorific value of 5,000 kilocalories or less per kilogram)	750 cubic centimeters
(i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel (excluding those listed in the preceding row)	600 cubic centimeters
(i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn crude oil tar (excluding those listed in the preceding two rows)	280 cubic centimeters
(v)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order other than those listed in the preceding rows	230 cubic centimeters
(v)	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 40,000 cubic meters or more, and excluding heating furnaces for forge welding steel pipes)	220 cubic centimeters
(v)	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 40,000 cubic meters or more, and excluding cracking furnaces and independent overheating furnaces for the manufacture of ethylene, reforming furnaces for the manufacture of methanol, and reforming furnaces for the manufacture of ammonia)	210 cubic centimeters

Remarks

The provisions of remarks 1 and 2 to Appended Table 3-2 apply mutatis mutandis to the volume of nitrogen dioxides listed in the right column of this table. In this case, in Remark 1 of the table, “row 2, row 5 and row 5-2” is read as “row 2, row 3 and row 7,” “row 3” is read as “row 4 and row 5” and “row 4 and row 4-2” is read as “row 6.”

Appended Table 3 of the Supplementary Provisions

(i) )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volume of 10,000 cubic meters or more; the same applies hereinafter in this Table) that exclusively burn gas and have emission gas volumes of 40,000 cubic meters or more	130 cubic centimeters
(ii) )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that exclusively burn gas and have emission gas volumes of less than 40,000 cubic meters	150 cubic centimeters
(ii) i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal (limited to those with a calorific value of 5,000 kilocalories or less per kilogram)	750 cubic centimeters
(i) v)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel (excluding those listed in the preceding row)	600 cubic centimeters
(v) )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn crude oil tar (excluding those listed in the preceding two rows)	280 cubic centimeters
(v) i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order other than those listed in the preceding rows with emission gas volumes of 100,000 cubic meters or more	230 cubic centimeters

(v ii)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order other than those listed in the preceding rows, which have emission gas volumes of 40,000 cubic meters or more (excluding those with sulfur oxide processing units (meaning units for processing sulfur oxides generated at units generating soot and smoke before they are emitted into the atmosphere from an outlet, which have the capacity to reduce the volume of sulfur oxides emitted by the unit generating soot and smoke by 80 percent or more, and including those for which installation work is underway at the time this Order of the Prime Minister's Office comes into force) attached at the time this Order of the Prime Minister's Office comes into force)	190 cubic centimeters
(v iii )	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding heating furnaces for forge welding steel pipes; the same applies in the following row), which have emission gas volumes of 40,000 cubic meters or more	220 cubic centimeters
(i x)	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order that have emission gas volumes of less than 40,000 cubic meters	200 cubic centimeters



(x)	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding cracking furnaces and independent overheating furnaces the manufacture of ethylene, reforming furnaces for the manufacture of methanol, and reforming furnaces for the manufacture of ammonia; the same applies in the following row), which have emission gas volumes of 40,000 cubic meters or more	210 cubic centimeters
(x i)	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order that have emission gas volumes of less than 40,000 cubic meters	180 cubic centimeters

**Remarks**

The provisions of remarks 1 and 2 to Appended Table 3-2 apply mutatis mutandis to the volume of nitrogen dioxides listed in the right column of this table. In this case, in Remark 1 of the table, "row 1 and row 1-2" is read as "row 1 and row 2," "row 2, row 5 and row 5-2" is read as "row 3, row 4, row 10, and row 11," "row 3" is read as "row 5, row 6 and row 7" and "row 4 and row 4-2" is read as "row 8 and row 9."

**Supplementary Provisions [Order of the Prime Minister's Office No.50 of September 28, 1976] [Extract]**

- (1) This Order comes into effect as of the day of promulgation.
- (2) If the value of K in the mathematical formula prescribed in Article 3, paragraph (1) pursuant to the provisions of paragraph (2) of the Supplementary Provisions of the Regulation for Enforcement of the Air Pollution Control Act (hereinafter referred to as "the Supplementary Provisions" for a region in which the value of K in the mathematical formula is to be the value specified in an ordinance or rule of the local government until otherwise provided for by law is not smaller than the value for that region set forth in the right-hand column of post-amendment Appended Table 1, notwithstanding the provisions of paragraph (2) of the Supplementary Provisions, the value set forth in that right-hand column is used.
- (3) If the K value associated with the emission standard for sulfur oxides applied to a unit generating soot or smoke prescribed in paragraph (5) of the Supplementary Provisions of the Order of the Prime Minister's Office Partially Amending the Regulation for Enforcement of the Air Pollution Control Act

(Order of the Prime Minister's Office No.59 of 1971; hereinafter referred to as "Amending Order of 1971"), or paragraph (6) of the Supplementary Provisions of the Order of the Prime Minister's Office Partially Amending the Regulation for Enforcement of the Air Pollution Control Act (Order of the Prime Minister's Office No.10 of 1974; hereinafter referred to as "Amending Order of 1974") pursuant to the provisions of paragraph (5) of the Amending Order of 1971 or paragraph (6) of the Amending Order of 1974 is not smaller than the value shown in the right-hand column of the amended Appended Table 1 for the areas where a unit generating soot or smoke is installed set forth in the middle column of that table, notwithstanding the provisions of the preceding paragraph or paragraph (5) of the Supplementary Provisions of the Amending Order of 1971 or paragraph (5) of the Amending Order of 1971 or paragraph (6) of the Amending Order of 1974, the emission standard for sulfur oxides applied to the unit generating soot or smoke is the volume of sulfur oxides calculated using the mathematical formula in Article 3, paragraph (1) with the value set forth in the right-hand column as the K value.

- (4) The provisions of the amended Appended Table 1 and the preceding two paragraphs applicable to a person that has in place a unit generating soot or smoke at the time this Order of the Prime Minister's Office comes into effect (this includes a person that is doing work on the installation of such a unit at that time; the same applies hereinafter) do not apply until December 25, 1976 (for a person that has in place a unit as set forth in the following items on that day, September 25, 1977, for that unit (or the date on which the work is completed, if the work is completed prior to that date)) in cases that are associated with the provisions of Article 13, paragraph (1) of the Air Pollution Control Act (Act No. 97 of 1968; hereinafter referred to as "the Act"), and prior laws continue to govern.
- (i) the relevant unit generating soot or smoke, in a case in which installation work is being performed on a sulfur oxide processing unit (meaning a unit for processing sulfur oxides generated at a unit generating soot or smoke and emitted into the atmosphere from an outlet, which has the capability to reduce the volume of sulfur oxides emitted by the unit generating soot or smoke by 80 percent or more, and that causes the sulfur oxides emitted into the atmosphere from the outlet after processing to conform to the post-amendment sulfur oxide emission standard) attached to a unit set forth in Appended Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order")
- (ii) the relevant unit generating soot or smoke, in a case in which installation work is being performed to raise the actual height of the outlet with which a unit set forth in Appended Table 1 of the Cabinet Order (limited to one with

- an outlet that is at an actual height of less than 20 meters) is equipped to 20 meters or more (limited to a unit installed by a small or medium-sized enterprise (meaning a small or medium-sized enterprise prescribed in Article 2 of the Small and Medium-sized Enterprise Basic Act (Act No. 154 of 1963))
- (6) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Order of the Prime Minister's Office comes into effect.

**Supplementary Provisions [Order of the Prime Minister's Office No.6 of April 2, 1977]**

- (1) This Order of the Prime Minister's Office comes into effect as of the day of promulgation.
- (2) Notwithstanding the provisions of Article 18, paragraph (1), item (v) of the Regulation for Enforcement of the Air Pollution Control Act amended by this Order of the Prime Minister's Office, until April 1, 1978, it is permissible to elect for prior laws to continue to govern oxidant measurement equipment (excluding oxidant measurement equipment prescribed in Article 18, paragraph (1), item (v) of the Regulation for Enforcement of the Air Pollution Control Act amended by this Order of the Prime Minister's Office) that has been installed as of the time this Order of the Prime Minister's Office comes into effect; provided, however, that the hourly value of oxidants is to be calculated by multiplying the measured hourly value by 0.8.

**Supplementary Provisions [Order of the Prime Minister's Office No.32 of June 16, 1977]**

- (1) This Order of the Prime Minister's Office comes into effect as of June 18, 1977; provided, however, that the part that relates to boilers (excluding those that exclusively burn gas and those that burn solid fuel) set forth in row 1 of Appended Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") that have emission gas volumes (meaning the maximum volume of emission gases per hour when calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere; the same applies hereinafter) of less than 10,000 cubic meters (hereinafter referred to as "liquid fuel fired small boilers") come into effect as of September 10, 1977.
- (2) The post-amendment provisions of Appended Table 3 do not apply to a waste incinerator as set forth in row 1-13 of the Appended Table of Cabinet Order that has been installed as of the effective date of this Order of the Prime Minister's Office (including a unit for which installation work is underway)

until November 30, 1979.

- (3) The nitrogen oxide emission standard does not apply to a unit set forth in column 2 of the amended Appended Table 3-2 that has been installed as of the effective date of this Order of the Prime Minister's Office (or September 10, 1977, for a liquid fuel fired small boiler; the same applies in paragraph (6) of the Supplementary Provisions) (including a unit for which installation work is underway at that time and excluding a unit prescribed in row 12 of that table and a unit prescribed from the following paragraph to paragraph (6) of the Supplementary Provisions) until otherwise provided for by law.
- (4) Notwithstanding the post-amendment provisions of Appended Table 3-2, until otherwise provided by law, the emission standard for nitrogen oxides at a unit set forth in column 2 of Appended Table 1 of the Supplementary Provisions for which installation work began during the period from August 10, 1973, to December 9, 1975, is the volume of nitrogen oxides set forth in the column 4 of Appended Table 1 of the Supplementary Provisions per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in column 2 of that table and scale set forth in column 3 of that table.
- (5) Notwithstanding the post-amendment provisions of Appended Table 3-2, until otherwise provided by law, the emission standard for nitrogen oxides at a unit set forth in column 2 of Appended Table 2 of the Supplementary Provisions for which installation work began during the period from December 10, 1975, to the day preceding the effective date of this Order of the Prime Minister's Office is the volume of nitrogen oxides set forth in column 4 of Appended Table 2 of the Supplementary Provisions per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in column 2 of that table and scale set forth in column 3 of that table.
- (6) Notwithstanding the post-amendment provisions of Appended Table 3-2, until otherwise provided by law, the emission standard for nitrogen oxides at a unit set forth in column 2 of Appended Table 3 of the Supplementary Provisions that has been installed as of the day on which this Order of the Prime Minister's Office comes into effect (including a unit for which installation work is underway at that time and excluding a unit prescribed in the preceding two paragraphs; the same applies below in this paragraph) is the volume of nitrogen oxides set forth in the column 4 of Appended Table 3 of the Supplementary Provisions per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in column 2 of that table and scale set forth in column 3 of that table; provided, however, that the nitrogen oxide emission standard does not apply to a unit set forth in column 2 that is

also as set forth in the following items until the day set forth in the relevant item:

- (i) a unit as set forth in row 1 and row 4 through row 7 of Appended Table 3 of the Supplementary Provisions (limited to one with an emission gas volume of 10,000 cubic meters or more and less than 100,000 cubic meters), a unit set forth in row 9 of that table (limited to one that has an emission gas volume of 40,000 cubic meters or more and less than 100,000 cubic meters), or a unit as set forth in row 11, row 12 or row 17 of that table (limited to one with an emission gas volume of 10,000 cubic meters or more and less than 40,000 cubic meters): November 30, 1977
  - (ii) a unit set forth in row 1, row 4, row 5, row 11, row 12 and row 17 of Appended Table 3 of the Supplementary Provisions (limited to one that has an emission gas volume of less than 10,000 cubic meters), a unit set forth in row 8 of that table (limited to one that has an emission gas volume of 10,000 cubic meters or more and less than 100,000 cubic meters), a unit as set forth in row 9 of that table (limited to one that has an emission gas volume of 10,000 cubic meters or more and less than 40,000 cubic meters), or a unit as set forth in row 10, row 13 to row 16, or row 19 of that table: April 30, 1980
  - (iii) a unit as set forth in row 6 to row 9 of Appended Table 3 of the Supplementary Provisions (limited to one that has an emission gas volume of less than 10,000 cubic meters): September 30, 1980
  - (iv) a unit as set forth in row 18 of Appended Table 3 of the Supplementary Provisions: March 31, 1981
- (7) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Order of the Prime Minister's Office comes into effect.

Appended Table 1 of the Supplementary Provisions

( i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 40,000 cubic meters or more; the same applies hereinafter in this Table) that exclusively burn gas		130 cubic centimeters
( i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel		480 cubic centimeters

( i i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order other than those listed in the preceding two rows		180 cubic centimeters
( i v )	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order that are radiant tube-type heating furnaces (limited to those that have emission gas volumes of 10,000 cubic meters or more)		200 cubic centimeters
( v )	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding heating furnaces for forge welding steel pipes and those listed in the preceding row)	Emission gas volumes of 100,000 cubic meters or more	200 cubic centimeters until April 31, 1980
			160 cubic centimeters From May 1, 1980
		Emission gas volumes of 40,000 cubic meters or more and less than 100,000 cubic meters	200 cubic centimeters until April 30, 1980 170 cubic centimeters From May 1, 1980
	Emission gas volumes of less than 40,000 cubic meters	200 cubic centimeters	

( v i )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding cracking furnaces and independent overheating furnaces the manufacture of ethylene, reforming furnaces for the manufacture of methanol, and reforming furnaces for the manufacture of ammonia)		170 cubic centimeters
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Remarks

The amended provisions of remarks 1 and 2 to Appended Table 3-2 apply mutatis mutandis to the volume of nitrogen dioxides listed in column 4 of this table. In this case, in Remark 1 of the amended Appended Table 3-2, “row 2 and row 9” is read as “row 2 and row 6,” and “15 in the case of units listed in row 4, 10 in the case of units listed in row 5 and row 10, 11 in the case of units listed in row 6 to row 8” is read as “11 in the case of units listed in row 4 and row 5.”

Appended Table 2 of the Supplementary Provisions

(i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more; the same applies hereinafter in this Table) that exclusively burn gas	Emission gas volumes of 100,000 cubic meters or more	100 cubic centimeters
		Emission gas volumes of less than 100,000 cubic meters	130 cubic centimeters
(i i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel		480 cubic centimeters
(i ii )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order other than those listed in the preceding two rows		150 cubic centimeters

(i v )	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding heating furnaces for forge welding steel pipes for those less than 100,000 cubic meters)	Emission gas volumes of 100,000 cubic meters or more	100 cubic centimeters
		Emission gas volumes of less than 100,000 cubic meters	150 cubic centimeters
(v )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more)	Emission gas volumes of 40,000 cubic meters or more	100 cubic centimeters
		Emission gas volumes of less than 40,000 cubic meters	150 cubic centimeters
(v i)	Kilns listed in row 9 of Appended Table 1 of the Cabinet Order (limited to those used for the manufacture of cement that have emission gas volumes of 100,000 cubic meters or more)		250 cubic centimeters
(v ii )	Coke ovens listed in row 28 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 100,000 cubic meters or more)		200 cubic centimeters

Remarks

The amended provisions of remarks 1 and 2 to Appended Table 3-2 apply mutatis mutandis to the volume of nitrogen dioxides listed in column 4 of this table. In this case, in Remark 1 of the amended Appended Table 3-2, “row 2 and row 9” is read as “row 2 and row 5,” “15 in the case of unit listed in row 4, 10 in the case of units listed in row 5 and row 10” is read as “10 in the case of units listed in row 6,” “row 6 to row 8” is read as “row 4,” and “row 13” is read as “row 7.”

Appended Table 3 of the Supplementary Provisions



( i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 5,000 cubic meters or more; the same applies hereinafter in this Table) that exclusively burn gas	Emission gas volume of 100,000 cubic meters or more	170 cubic centimeters until November 30, 1977
			130 cubic centimeters from December 1, 1977
		Emission gas volume of 40,000 cubic meters or more and less than 100,000 cubic meters	130 cubic centimeters from December 1, 1977
		Emission gas volume of 10,000 cubic meters or more and less than 40,000 cubic meters	150 cubic centimeters from December 1, 1977
		Emission gas volume of less than 10,000 cubic meters	150 cubic centimeters from May 1, 1980
( i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal (limited to those with a calorific value of 5,000 kilocalories or less per kilogram; the applies below in this table) that use the ceiling burner combustion method		650 cubic centimeters
( i i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal and have a furnace separating wall radiant superheater (limited to those with a furnace heat release rate of 140,000 kilocalories per cubic meter per hour or more during maximum continuous evaporation)		750 cubic centimeters until April 30, 1980
			550 cubic centimeters from May 1, 1980

( i v )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal (excluding those listed in the preceding two rows)	Emission gas volume of 100,000 cubic meters or more	750 cubic centimeters until April 30, 1980  480 cubic centimeters from May 1, 1980
		Emission gas volume of 10,000 cubic meters or more and less than 100,000 cubic meters	750 cubic centimeters from December 1, 1977
		Emission gas volume of less than 10,000 cubic meters	480 cubic centimeters from May 1, 1980
( v )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel (excluding those listed in the three preceding rows)	Emission gas volume of 100,000 cubic meters or more	600 cubic centimeters until April 30, 1980  480 cubic centimeters from May 1, 1980
		Emission gas volume of 10,000 cubic meters or more and less than 100,000 cubic meters	600 cubic centimeters from December 1, 1977
		Emission gas volume of less than 10,000 cubic meters	480 cubic centimeters from May 1, 1980

( v i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn crude oil tar (excluding those listed from row 2 to the preceding row), those with sulfur oxide processing units (meaning units for processing sulfur oxides generated at a unit generating soot and smoke before they are emitted into the atmosphere from an outlet, which have the capability to reduce the volume of sulfur oxides generated by the unit generating soot and smoke by 80 percent or more, and including those for which installation work is underway at the time this Order of the Prime Minister's Office comes into force) attached at the time of this Order of the Prime Minister's Office comes into force; the same applies below in this table) (limited to those that have emission gas volumes of less than 1,000,000 cubic meters)	Emission gas volume of 100,000 cubic meters or more	280 cubic centimeters until April 30, 1980
			210 cubic centimeters from May 1, 1980
		Emission gas volume of 10,000 cubic meters or more and less than 100,000 cubic meters	280 cubic centimeters from December 1, 1977
		Emission gas volume of less than 10,000 cubic meters	280 cubic centimeters from October 1, 1980
( v i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn crude oil tar (excluding those listed from row 2 to the preceding row)	Emission gas volume of 500,000 cubic meters or more	280 cubic centimeters until April 30, 1980



			180 cubic centimeters from May 1, 1980
		Emission gas volume of 100,000 cubic meters or more and less than 500,000 cubic meters	230 cubic centimeters until April 30, 1980 190 cubic centimeters from May 1, 1980
		Emission gas volume of 40,000 cubic meters or more and less than 100,000 cubic meters	190 cubic centimeters From December 1, 1977
		Emission gas volume of 10,000 cubic meters or more and less than 40,000 cubic meters	230 cubic centimeters from May 1, 1980
		Emission gas volume of less than 10,000 cubic meters	250 cubic centimeters from October 1, 1980
( x )	Sintering furnaces listed in row 3 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volume of 10,000 cubic meters or more, and excluding pellet kilns)	Emission gas volume of 100,000 cubic meters or more	260 cubic centimeters from May 1, 1980
		Emission gas volume of less than 100,000 cubic meters	270 cubic centimeters from May 1, 1980
( x i )	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order that are radiant tube-type heating furnaces (limited to those that have emission gas volume of 5,000 cubic meters or more)	Emission gas volume of 40,000 cubic meters or more	220 cubic centimeters until April 30, 1980  200 cubic centimeters from May 1, 1980
		Emission gas volume of 10,000 cubic meters or more and less than 40,000 cubic meters	200 cubic centimeters from December 1, 1977

		Emission gas volume of less than 10,000 cubic meters	200 cubic centimeters from May 1, 1980
( x i i i )	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 5,000 cubic meters or more and excluding heating furnaces for forge welding steel pipes and those listed in the preceding row)	Emission gas volume of 100,000 cubic meters or more	220 cubic centimeters until April 30, 1980
			160 cubic centimeters from May 1, 1980
		Emission gas volume of 40,000 cubic meters or more and less than 100,000 cubic meters	220 cubic centimeters until April 30, 1980 170 cubic centimeters from May 1, 1980
		Emission gas volume of 10,000 cubic meters or more and less than 40,000 cubic meters	200 cubic centimeters from December 1, 1977
		Emission gas volume of less than 10,000 cubic meters	170 cubic centimeters from May 1, 1980
( x i i i )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 5,000 cubic meters or more; the same applies hereinafter in this Table) that are equipped with sulfur oxide processing units at the time this Order of the Prime Minister's Office comes into force (limited to those that have emission gas volume of less than 10,000 cubic meters)		190 cubic centimeters from May 1, 1980

( x i v )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order that are cracking furnaces for the manufacture of ethylene (excluding those listed in the preceding row and those with emission gas volumes of 10,000 cubic meters or more and less than 40,000 cubic meters)	Emission gas volume of 40,000 cubic meters or more	170 cubic centimeters from May 1, 1980
		Emission gas volume of less than 10,000 cubic meters	180 cubic centimeters from May 1, 1980
( x v )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order that are independent overheating furnaces for the manufacture of ethylene and reforming furnaces for the manufacture of methanol (excluding those listed in row 13 and those that have emission gas volumes of 40,000 cubic meters or more and less than 100,000 cubic meters)	Emission gas volume of 100,000 cubic meters or more	170 cubic centimeters from May 1, 1980
		Emission gas volume of less than 40,000 cubic meters	180 cubic centimeters from May 1, 1980
( x v i )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order that are reforming furnaces for the manufacture of ammonia (excluding those listed in row 13)	Emission gas volume of 40,000 cubic meters or more	170 cubic centimeters from May 1, 1980
		Emission gas volume of less than 40,000 cubic meters	180 cubic centimeters from May 1, 1980

( x v i i )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order (excluding those listed in row 13, cracking furnaces and independent overheating furnaces the manufacture of ethylene, reforming furnaces for the manufacture of methanol, and reforming furnaces for the manufacture of ammonia)	Emission gas volume of 40,000 cubic meters or more	210 cubic centimeters until April 30, 1980
			170 cubic centimeters from May 1, 1980
		Emission gas volume of 10,000 cubic meters or more and less than 40,000 cubic meters	180 cubic centimeters from December 1, 1977
		Emission gas volume of less than 10,000 cubic meters	180 cubic centimeters from May 1, 1980
( x v i i )	Kilns listed in row 9 of Appended Table 1 of the Cabinet Order (limited to those used for the manufacture of cement, and excluding those of wet type)		480 cubic centimeters from April 1, 1981
( x i x )	Coke ovens listed in row 28 of Appended Table 1 of the Cabinet Order (excluding those of Otto type)		350 cubic centimeters from May 1, 1980

**Remarks**

The amended provisions of remarks 1 and 2 to Appended Table 3-2 apply mutatis mutandis to the volume of nitrogen dioxides listed in column 4 of this table. In this case, in Remark 1 of the amended Appended Table 3-2, “row 2 and row 9” is read as “row 2 to row 5 and row 13 to row 17,” “row 3” is read as “row 6 to row 9,” “row 4” is read as “row 10,” “row 5 and row 10” is read as “row 18,” “row 6 to row 8” is read as “row 11 and row 12” and “12 in the case of units listed in row 11, Os0s in the case of units listed in row 12, 7 in the case of units listed in row 13” is read as “7 in the case of units listed in row 19.”

**Supplementary Provisions [Order of the Prime Minister's Office No.37 of August 2, 1979]**



- (1) This Order of the Prime Minister's Office comes into effect as of August 10, 1979.
- (2) Until August 9, 1982, the nitrogen oxide emission standard does not apply to a unit as referred to in Appended Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") that has been installed as of the effective date of this Order of the Prime Minister's Office and that constitutes a calcination furnace as set forth in row 3 of that table (excluding one used for manufacturing alumina), a blast furnace as set forth in row 14 of that table that constitutes a scorification furnace used for smelting zinc (limited to one that uses coal or coke as fuel and a reducing agent), a melting furnace that constitutes a refining furnace used for refining copper (limited to one using ammonia as a reducing agent) or a zinc or cadmium rectification furnace that is used for refining zinc (limited to one that burns liquid petroleum gas or coke furnace gas).
- (3) Until otherwise provided for by law, the nitrogen oxide emission standard does not apply to a heating furnace as set forth in row 6 of Appended Table 1 of the Cabinet Order that constitutes a heating furnace for forge welding steel pipes, a kiln used for the manufacture of cement as set forth in row 9 of that table that is of wet type or a coke furnace as set forth in row 28 of that table that is of Otto type for which installation work began by June 17, 1977 (excluding one that has an emission gas volume (meaning the maximum volume of emission gases per hour converted into the state of one atmosphere of pressure with the temperature being zero degrees; the same applies hereinafter) of 100,000 cubic meters or more and for which installation work began on December 10, 1975 or later); a waste incinerator as set forth in row 13 of that table (excluding a continuous furnace) for which installation work began by June 17, 1977; or a boiler as set forth in row 1 of that table that is of overload firing type (limited to one with an emission gas volume of less than 5,000 cubic meters and excluding one that exclusively burns gas or one that burns solid fuel) for which installation work began by September 9 of that year.
- (4) Notwithstanding the post-amendment provisions of Appended Table 3-2, until otherwise provided by law, the emission standard for nitrogen oxides at a unit set forth in column 2 of Appended Table 1 of the Supplementary Provisions for which installation work began during the period from August 10, 1973, to December 9, 1975, is the volume of nitrogen oxides set forth in the column 4 of Appended Table 1 of the Supplementary Provisions per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in column 2 of that table and scale set forth in column 3 of that table.
- (5) Notwithstanding the post-amendment provisions of Appended Table 3-2, until

otherwise provided by law, the emission standard for nitrogen oxides at a unit set forth in column 2 of Appended Table 1 of the Supplementary Provisions for which installation work began during the period from December 10, 1975, to June 17, 1977, is the volume of nitrogen oxides set forth in column 4 of Appended Table 2 of the Supplementary Provisions per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in column 2 of that table and scale set forth in column 3 of that table.

(6) Notwithstanding the post-amendment provisions of Appended Table 3-2, until otherwise provided by law, the emission standard for nitrogen oxides at a unit set forth in column 2 of Appended Table 3 of the Supplementary Provisions that has been installed as of the effective date of this Order of the Prime Minister's Office other than those set forth in the following items is the volume of nitrogen oxides set forth in column 4 of Appended Table 3 of the Supplementary Provisions per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in column 2 of that table and scale set forth in column 3 of that table .

(i) a unit prescribed in the preceding two paragraphs

(ii) a unit as referred to in Appended Table 1 of the Cabinet Order for which installation work began during the period from June 18, 1977 until the day preceding the effective date of this Order of the Prime Minister's Office, that is as follows:

(a) a boiler as set forth in row 1 of Appended Table 1 of the Cabinet Order (excluding one for which installation work began during the period from June 18, 1977, until September 9, 1977 (excluding one that exclusively burns gas and one that burns solid fuel) that have an emission gas volume of less than 10,000 cubic meters (hereinafter referred to as a "liquid fuel fired small boiler"))

(b) a kiln as set forth in row 3 of Appended Table 1 of the Cabinet Order (limited to one that has an emission gas volume of 10,000 cubic meters or more) or a calcination furnace (limited to one used for the manufacture of alumina that has an emission gas volume of 10,000 cubic meters or more)

(c) a heating furnace as set forth in row 6 of Appended Table 1 of the Cabinet Order

(d) a heating furnace as set forth in row 7 of Appended Table 1 of the Cabinet Order

(e) a kiln as set forth in row 9 of Appended Table 1 of the Cabinet Order that is used for the manufacture of cement

(f) a waste incinerator as set forth in row 13 of Appended Table 1 of the Cabinet Order (limited to one that has an emission gas volume of 40,000

cubic meters or more)

(g) a coke oven as set forth in row 28 of Appended Table 1 of the Cabinet Order.

(7) In the case referred to in the preceding paragraph, the nitrogen oxide emission standard does not apply to a unit set forth in column 2 of Appended Table 3 of the Supplementary Provisions that is as set forth in one of the following items until the day set forth in the relevant item:

(i) a unit as set forth in row 1, row 5, row 21, row 22 or row 29 of Appended Table 3 of the Supplementary Provisions (limited to one that has emission gas volume of 5,000 cubic meters or more and less than 10,000 cubic meters), a unit set forth in row 8 of that table (limited to one that has an emission gas volume of 10,000 cubic meters or more and less than 100,000 cubic meters), a unit as set forth in row 9 of that table (limited to one that has an emission gas volume of 10,000 cubic meters or more and less than 40,000 cubic meters), a unit as set forth in row 17 of that table (limited to one that has an emission gas volume of 10,000 cubic meters or more), a unit as set forth in row 23, row 28 or row 62 of that table, a unit as set forth in row 25 of that table (limited to one that has an emission gas volume of 40,000 cubic meters or more or one that has an emission gas volume of 5,000 cubic meters or more and less than 10,000 cubic meters) and a unit set forth in row 27 of that table (limited to one that has an emission gas volume of 100,000 cubic meters or more or one that has an emission gas volume of 5,000 cubic meters or more and less than 40,000 cubic meters): April 30, 1980

(ii) a unit as set forth in row 6 to row 9 of Appended Table 3 of the Supplementary Provisions (limited to one that has an emission gas volume of 5,000 cubic meters or more and less than 10,000 cubic meters): September 30, 1980

(iii) a unit set forth in row 33 of Appended Table 3 of the Supplementary Provisions: March 31, 1981

(iv) a unit set forth in row 10 to row 16, row 18 to row 20, row 24, row 26, row 30 to row 32 and row 34 to row 61 of Appended Table 3 of the Supplementary Provisions, a unit set forth in row 17 of that table (limited to one that has an emission gas volume of less than 10,000 cubic meters), a unit set forth in row 21, row 22 and row 29 of that table (limited to one that has an emission gas volume of less than 5,000 cubic meters), a unit set forth in row 25 of that table (limited to one that has an emission gas volume of 10,000 cubic meters or more and less than 40,000 cubic meters) and a unit set forth in row 27 of that table (limited to one that has an emission gas volume of 40,000 cubic meters or more and less than 100,000 cubic meters): August 9, 1982

(v) a unit set forth in row 1 to row 3 and row 5 to row 9 of Appended Table 3 of the Supplementary Provisions (limited to one that has an emission gas

volume of less than 5,000 cubic meters): August 9, 1984

(8) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Order of the Prime Minister's Office comes into effect.

Appended Table 1 of the Supplementary Provisions

( i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 40,000 cubic meters or more; the same applies hereinafter in the following ) that burn solid fuel		480 cubic centimeters
( i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn liquid fuel (excluding those listed in the preceding row)		180 cubic centimeters
( i i i i )	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order that are radiant tube-type heating furnaces (limited to those that have emission gas volumes of 10,000 cubic meters or more)		200 cubic centimeters
( i v )	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding heating furnaces for forge welding steel pipes and those listed in the preceding row)	Emission gas volumes of 100,000 cubic meters or more	200 cubic centimeters until April 30, 1980
		Emission gas volumes of 40,000 cubic meters or more and less than 100,000 cubic meters	160 cubic centimeters from May 1, 1980
			200 cubic centimeters until April 30, 1980

			170 cubic centimeters from May 1, 1980
		Emission gas volumes of less than 40,000 cubic meters	200 cubic centimeters until August 9, 1982 170 cubic centimeters from August 10, 1982
( v )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding cracking furnaces and independent overheating furnaces the manufacture of ethylene, reforming furnaces for the manufacture of methanol, and reforming furnaces for the manufacture of ammonia that have air preheaters and have emission gas volumes of 40,000 cubic meters or more and less than 100,000 cubic meters)		170 cubic centimeters

Remarks

(この式において、C、On、Os及びCsは、それぞれ次の値を表すものとする。(In this equation, C, On, Os and Cs shall represent the following values respectively:

C: Volume of nitrogen oxides (units: cubic centimeters)

On: The values listed in the right column of the following table for units in each of the rows listed in the left column of the same table.

R	4
o	
w	
2	

R o w  1 , r o w  5	6
R o w  3 , r o w  4	11

Os: Concentration of oxygen in the emission gasses (20 percent if the concentration exceeds 20 percent) (units: percent)

Cs: The concentration of nitrogen oxides measured using the method specified in Japan Industrial Standard K0104, calculated as the concentration per cubic meter of emission gasses calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere (units: cubic centimeters)

Appended Table 2 of the Supplementary Provisions

( i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more; the same applies hereinafter in this Table) that exclusively burn gas	Emission gas volumes of 100,000 cubic meters or more	100 cubic centimeters
		Emission gas volumes of less than 100,000 cubic meters	130 cubic centimeters
( i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel		480 cubic centimeters

( i i i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order other than those listed in the preceding two rows		150 cubic centimeters
(i v )	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding heating furnaces for forge welding steel pipes for those less than 100,000 cubic meters)	Emission gas volumes of 100,000 cubic meters or more	100 cubic centimeters
		Emission gas volumes of less than 100,000 cubic meters	150 cubic centimeters
(v )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 10,000 cubic meters or more)	Emission gas volumes of 40,000 cubic meters or more	100 cubic centimeters
		Emission gas volumes of less than 40,000 cubic meters	150 cubic centimeters
(v i )	Kilns listed in row 9 of Appended Table 1 of the Cabinet Order (limited to those used for the manufacture of cement that have emission gas volumes of 100,000 cubic meters or more)		250 cubic centimeters
(v i i )	Coke ovens listed in row 28 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of 100,000 cubic meters or more)		200 cubic centimeters

Remarks

The volume of nitrogen oxides set forth in column 4 of this table is the volume of nitrogen oxides calculated using the following formula. In this case, this is the average volume of a single process in units where the volume of nitrogen oxides fluctuates significantly.

$$C = ((21 \cdot O_n) / (21 \cdot O_s)) \cdot C_s$$

(In this equation, C, On, Os and Cs represent the following values respectively:

C: Volume of nitrogen oxides (units: cubic centimeters)

On: The values listed in the right column of the following table for units in each of the rows listed in the left column of the same table.

Row 3	4
Row 1	5
Row 2, row 5	6
Row 7	7
Row 6	10
Row 4	11

Os: Concentration of oxygen in the emission gases (20 percent in cases where the concentration exceeds 20 percent) (units: percent)

Cs: The concentration of nitrogen oxides measured using the method specified in Japan Industrial Standard K0104, calculated as the concentration per cubic meter of emission gasses calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere (units: cubic centimeters)

Appended Table 3 of the Supplementary Provisions

( i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that exclusively burn gas	Emission gas volumes of 40,000 cubic meters or more	130 cubic centimeters
		Emission gas volumes of less than 40,000 cubic meters	150 cubic centimeters
( i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal (limited to those with a calorific value of 5,000 kilocalories or less per kilogram; the same applies below in this table) that use the ceiling burner combustion method		650 cubic centimeters
( i i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal and have a furnace separating wall radiant superheater (limited to those with a furnace heat release rate of 140,000 kilocalories per cubic meter per hour or more during maximum continuous evaporation)	Emission gas volumes of 5,000 cubic meters or more	750 cubic centimeters until April 30, 1980



			550 cubic centimeters from May 1, 1980
		Emission gas volumes of less than 5,000 cubic meters	550 cubic centimeters
( i v )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal (limited to those that have emission gas volumes of 10,000 cubic meters or more, and excluding those listed in the preceding two rows)	Emission gas volumes of 100,000 cubic meters or more	750 cubic centimeters until April 30, 1980
			480 cubic centimeters from May 1, 1980
( i v )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel (excluding those listed in the three preceding rows)	Emission gas volumes of less than 100,000 cubic meters	750 cubic centimeters until August 9, 1982 480 cubic centimeters from August 10, 1982
( i v )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel (excluding those listed in the three preceding rows)	Emission gas volumes of 100,000 cubic meters or more	600 cubic centimeters until April 30, 1980
			480 cubic centimeters from May 1, 1980
		Emission gas volumes of 10,000 cubic meters or more and less than 100,000 cubic meters	600 cubic centimeters until August 9, 1982 480 cubic centimeters from August 10, 1982
		Emission gas volumes of less than 10,000 cubic meters	480 cubic centimeters

( v i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn crude oil tar (excluding those listed from row 2 through the preceding row) that have emission gas volumes of 40,000 cubic meters or more (excluding those that have sulfur oxide processing units (meaning units for processing sulfur oxides generated at units generating soot and smoke before they are emitted into the atmosphere from an outlet, which have the capability to reduce the volume of sulfur oxides emitted by the unit generating soot and smoke by 80 percent or more, and including those for which installation work was underway as of June 18, 1977 (September 10 of the same year in the case of liquid fuel fired small boilers)) attached as of June 18 of the same year (September 10 of the same year in the case of liquid fuel fired small boilers); the same applies below in this table) (limited to those that have emission gas volumes of less than 1,000,000 cubic meters, and excluding those that are of overload firing type that have emission gas volumes of less than 5,000 cubic meters)	Emission gas volumes of 100,000 cubic meters or more	280 cubic centimeters until April 30, 1980
		Emission gas volume of less than 100,000 cubic meters	210 cubic centimeters from May 1, 1980
		Emission gas volume of less than 100,000 cubic meters	280 cubic centimeters

( v i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn crude oil tar other than those listed from row 2 through the preceding row (excluding those that are of overload firing type that have emission gas volumes of less than 5,000 cubic meters)	Emission gas volumes of 500,000 cubic meters or more	280 cubic centimeters until April 30, 1980  180 cubic centimeters from May 1, 1980
		Emission gas volumes of 100,000 cubic meters or more and less than 500,000 cubic meters	280 cubic centimeters until April 30, 1980 190 cubic centimeters from May 1, 1980
		190 cubic centimeters from May 1, 1980	280 cubic centimeters until August 9, 1982 250 cubic centimeters from August 10,
		Emission gas volumes of less than 10,000 cubic meters	250 cubic centimeters

( v i i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order other than those listed in the preceding rows that were installed that have sulfur oxide processing units as of June 18, 1977 (September 10 of the same year in the case of liquid fuel fired small boilers) (limited to those that have emission gas volumes of less than 1,000,000 cubic meters, and excluding those that are of overload firing type that have emission gas volumes of less than 5,000 cubic meters)	Emission gas volumes of 100,000 cubic meters or more	230 cubic centimeters until April 30, 1980
			210 cubic centimeters from May 1, 1980
		Emission gas volumes of 40,000 cubic meters or more and less than 100,000 cubic meters	210 cubic centimeters
		Emission gas volumes of 10,000 cubic meters or more and less than 40,000 cubic meters	250 cubic centimeters
		Emission gas volumes of less than 10,000 cubic meters	280 cubic centimeters
( i x )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order other than those listed the preceding rows (excluding those that are of overload firing type that have emission gas volumes of less than 5,000 cubic meters)	Emission gas volumes of 500,000 cubic meters or more	230 cubic centimeters until April 30, 1980
			180 cubic centimeters from May 1, 1980

		Emission gas volumes of 100,000 cubic meters or more and less than 500,000 cubic meters	230 cubic centimeters until April 30, 1980 190 cubic centimeters from May 1, 1980
		Emission gas volumes of 40,000 cubic meters or more and less than 100,000 cubic meters	190 cubic centimeters
		Emission gas volumes of 10,000 cubic meters or more and less than 40,000 cubic meters	230 cubic centimeters
		Emission gas volumes of less than 10,000 cubic meters	250 cubic centimeters
( x )	Gas generators listed in row 2 of Appended Table 1 of the Cabinet Order that are used for the manufacture of hydrogen (limited to those that use the ceiling burner combustion method)		360 cubic centimeters
( x i )	Facilities listed in row 2 of Appended Table 1 of the Cabinet Order other than those listed in the preceding row		170 cubic centimeters
( x i i )	Roasting furnaces listed in row 3 of Appended Table 1 of the Cabinet Order		250 cubic centimeters
( x i i i )	Sintering furnaces that are pellet kilns listed in row 3 of Appended Table 1 of the Cabinet Order (limited to those that exclusively burn gas)		540 cubic centimeters
( x i v )	Sintering furnaces listed in row 3 of Appended Table 1 of the Cabinet Order that are pellet kilns other than those listed in the preceding row		300 cubic centimeters

(xv)	Sintering furnaces listed in row 3 of Appended Table 1 of the Cabinet Order other than those listed in the preceding two rows	Emission gas volumes of 100,000 cubic meters or more	260 cubic centimeters
		Emission gas volumes of 10,000 cubic meters or more and less than 100,000 cubic meters	270 cubic centimeters
		Emission gas volumes of less than 10,000 cubic meters	300 cubic centimeters
(xvi)	Calcination furnaces listed in row 3 of Appended Table 1 of the Cabinet Order that are used for the manufacture of alumina		350 cubic centimeters
(xvii)	Blast furnaces listed in row 4 of Appended Table 1 of the Cabinet Order		120 cubic centimeters
(xviii)	Melting furnaces listed in row 5 of Appended Table 1 of the Cabinet Order (excluding cupola furnaces)		200 cubic centimeters
(xix)	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order that are radiant tube-type heating furnaces	Emission gas volumes of 40,000 cubic meters or more	220 cubic centimeters until April 30, 1980  200 cubic centimeters from May 1, 1980
		Emission gas volumes of less than 40,000 cubic meters	200 cubic centimeters
(xx)	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order (excluding heating furnaces for forge welding steel pipes and those listed in the preceding row)	Emission gas volumes of 100,000 cubic meters or more	220 cubic centimeters until April 30, 1980

			160 cubic centimeters from May 1, 1980
		Emission gas volumes of 40,000 cubic meters or more and less than 100,000 cubic meters	220 cubic centimeters until April 30, 1980 170 cubic centimeters from May 1, 1980
		Emission gas volumes of 10,000 cubic meters or more and less than 40,000 cubic meters	200 cubic centimeters until August 9, 1982 170 cubic centimeters from August 10, 1982
		Emission gas volumes of 5,000 cubic meters or more and less than 10,000 cubic meters	170 cubic centimeters
		Emission gas volumes of less than 5,000 cubic meters	200 cubic centimeters
( x x i )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order that are installed that have sulfur oxide processing facilities as of June 18, 1977 (limited to those that have emission gas volumes of 5,000 cubic meters or more and less than 10,000 cubic meters)		190 cubic centimeters
( x x i i )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order that are cracking furnaces for the manufacture of ethylene (limited to those with a hearth-type burner and emission gas volumes of 10,000 cubic meters or more and less than 40,000 cubic meters)		280 cubic centimeters

( x x i i i )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order that are cracking furnaces for the manufacture of ethylene (limited to those that have emission gas volumes of 5,000 cubic meters or more and excluding those listed in the preceding two rows)	Emission gas volumes of 40,000 cubic meters or more	170 cubic centimeters
		Emission gas volumes of less than 40,000 cubic meters	180 cubic centimeters
( x x i v )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order that are independent overheating furnaces for the manufacture of ethylene and reforming furnaces for the manufacture of methanol (limited to those that have air preheaters with emission gas volumes of 40,000 cubic meters or more and less than 100,000 cubic meters)		430 cubic centimeters
( x x v )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order that are independent overheating furnaces for the manufacture of ethylene (limited to those that have emission gas volumes of 5,000 cubic meters or more and excluding those listed in row 21 and the preceding row)	Emission gas volumes of 100,000 cubic meters or more	170 cubic centimeters
		Emission gas volumes of less than 100,000 cubic meters	180 cubic centimeters



( x x v i i )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order that are reforming furnaces for the manufacture of ammonia (limited to those that have emission gas volumes of 5,000 cubic meters or more and excluding those listed in row 21)	Emission gas volumes of 40,000 cubic meters or more	170 cubic centimeters
		Emission gas volumes of less than 40,000 cubic meters	180 cubic centimeters
( x x v i i )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order other than those listed in row 21 to the preceding row	Emission gas volumes of 40,000 cubic meters or more	210 cubic centimeters until April 30, 1980  170 cubic centimeters from May 1, 1980
		Emission gas volumes of 5,000 cubic meters or more and less than 40,000 cubic meters	180 cubic centimeters
		Emission gas volumes of less than 5,000 cubic meters	200 cubic centimeters
( x x v i i )	Catalytic regeneration towers listed in row 8 of Appended Table 1 of the Cabinet Order		300 cubic centimeters
( x x i x )	Combustion furnaces listed in row 2 of Appended Table 1-8 of the Cabinet Order		300 cubic centimeters

( x x x )	Coal-fired sintering furnaces listed in row 9 of Appended Table 1 of the Cabinet Order (limited to those that are gas-fired rotary kilns)		300 cubic centimeters
( x x x i )	Kilns listed in row 9 of Appended Table 1 of the Cabinet Order that are used for the manufacture of cement (excluding those of wet type)		480 cubic centimeters
( x x x x i i )	Kilns listed in row 9 of Appended Table 1 of the Cabinet Order that are used for the manufacture of fire-resistant bricks or fire-resistant materials		450 cubic centimeters
( x x x i i i )	Melting furnaces listed in row 9 of Appended Table 1 of the Cabinet Order that are used for the manufacture of plate glass or glass fiber products (including glass fiber)		400 cubic centimeters
( x x x x - i i )	Melting furnaces listed in row 9 of Appended Table 1 of the Cabinet Order that are used for the manufacture of optical glass, electric glass or frit (limited to those that burn exclusively using oxygen)		800 cubic centimeters
( x x x x i v )	Melting furnaces listed in row 9 of Appended Table 1 of the Cabinet Order that are used for the manufacture of optical glass, electric glass or frit other than those listed in the preceding row		900 cubic centimeters

( x x x v )	Melting furnaces listed in row 9 of Appended Table 1 of the Cabinet Order (limited to those that are used for the manufacture of glass) other than those listed in the preceding three rows		500 cubic centimeters
( x x x v i )	Units listed in row 9 of Appended Table 1 of the Cabinet Order other than those listed in row 30 to the preceding row (those that are kilns used for the manufacture of cement, excluding those of wet type)		200 cubic centimeters
( x x x v i i )	Reacting furnaces listed in row 10 of Appended Table 1 of the Cabinet Order that are used for the manufacture of potassium sulfate		250 cubic centimeters
( x x x v i i i )	Reacting furnaces listed in row 10 of Appended Table 1 of the Cabinet Order that are used for the manufacture of sulfuric acid (limited to those using nitrogen oxide as a catalyst)		700 cubic centimeters
( x x x i x )	Facilities listed in row 10 of Appended Table 1 of the Cabinet Order other than those listed in the two preceding rows		200 cubic centimeters
( x l )	Drying furnaces listed in row 11 of Appended Table 1 of the Cabinet Order		250 cubic centimeters

( x l i i )	Waste incinerators listed in row 13 of Appended Table 1 of the Cabinet Order that burn using the floating rotary combustion method (limited to continuous furnaces) and those that burn waste emitted from the process of manufacturing or using nitrides, amides or derivatives of these, or processing of wastewater using ammonia (limited to those that have emission gas volumes of less than 40,000 cubic meters)		900 cubic centimeters
( x l i i )	Waste incinerators listed in row 13 of Appended Table 1 of the Cabinet Order other than those listed in the preceding row (limited to continuous furnaces)		300 cubic centimeters
( x l i i i )	Roasting furnaces listed in row 14 of Appended Table 1 of the Cabinet Order		250 cubic centimeters
( x l i v )	Sintering furnaces listed in row 14 of Appended Table 1 of the Cabinet Order		300 cubic centimeters
( x l v )	Blast furnaces listed in row 14 of Appended Table 1 of the Cabinet Order that are vertical distillation furnaces used for smelting zinc		230 cubic centimeters

( x l v i i )	Blast furnaces listed in row 14 of Appended Table 1 of the Cabinet Order that are those listed in the preceding row and those that are scorification furnaces used for smelting zinc other than those using coal or coke as fuel and a reducing agent		120 cubic centimeters
( x l v i i )	Melting furnaces listed in row 14 of Appended Table 1 of the Cabinet Order that are those used for smelting zinc using ammonia as fuel a reducing agent and those that are zinc and cadmium rectification furnaces used for refining zinc other than those that burn liquid petroleum gas or coke furnace gas		200 cubic centimeters
( x l v i i )	Drying furnaces listed in row 14 of Appended Table 1 of the Cabinet Order		200 cubic centimeters
( x l i x )	Reacting furnaces listed in row 18 of Appended Table 1 of the Cabinet Order		200 cubic centimeters
( l )	Kilns listed in row 21 of Appended Table 1 of the Cabinet Order		200 cubic centimeters
( l i )	Melting furnaces listed in row 21 of Appended Table 1 of the Cabinet Order		650 cubic centimeters
( l i )	Drying furnaces listed in row 23 of Appended Table 1 of the Cabinet Order		200 cubic centimeters

( l i i )	Kilns listed in row 23 of Appended Table 1 of the Cabinet Order		200 cubic centimeters
( l i v )	Melting furnaces listed in row 24 of Appended Table 1 of the Cabinet Order		200 cubic centimeters
( l v )	Melting furnaces listed in row 25 of Appended Table 1 of the Cabinet Order		200 cubic centimeters
( l v i )	Melting furnaces listed in row 26 of Appended Table 1 of the Cabinet Order		200 cubic centimeters
( l v i i )	Reverberating furnaces listed in row 26 of Appended Table 1 of the Cabinet Order		650 cubic centimeters
( l v i i )	Reacting furnaces listed in row 26 of Appended Table 1 of the Cabinet Order		200 cubic centimeters
( l i x )	Coke ovens listed in row 28 of Appended Table 1 of the Cabinet Order (excluding those of Otto type)		350 cubic centimeters

Remarks

The volume of nitrogen oxides set forth in column 4 of this table is the volume of nitrogen oxides calculated using the following formula (in the case of units listed in row 33-2, melting furnaces listed in row 56 that are used for the manufacture of lead oxide, and reacting furnaces listed in row 58 that are used for the manufacture of lead oxide or lead nitrate, C=C<sub>s</sub>). In this case, this is the average volume of a single process in units where the volume of nitrogen oxides fluctuates significantly.

$$C = ((21 \cdot O_n) / (21 \cdot O_s)) \cdot C_s$$

(In this equation, C, O<sub>n</sub>, O<sub>s</sub> and C<sub>s</sub> represent the following values

C: Volume of nitrogen oxides (units: cubic centimeters)

On: The values listed in the right column of the following table for facilities in each of the rows listed in the left column of the same table.

Row 6, row 7, row 8, row 9	4
Row 1	5
Row 2, row 3, row 4, row 5, row 21, row 22, row 23, row 24, row 25, row 26, row 27, row 28, row 37, row 39, row 49, row 58	6
Row 10, row 11, row 59	7
Row 29	8
Row 16, row 31	10
Row 19, row 20	11
Row 18, row 41, row 42, row 47, row 54, row 55, row 56	12
Row 12, row 43	14
Row 13, row 14, row 15, row 17, row 30, row 33, row 35, row 36, row 38, row 44, row 45, row 46, row 50, row 51, row 53, row 57	15
Row 34, row 40, row 48, row 52	16
Row 32	18

Os: Concentration of oxygen in the emission gasses (20 percent in cases where the concentration exceeds 20 percent) (units: percent)

Cs: The concentration of nitrogen oxides measured using the method specified in Japan Industrial Standard K0104, calculated as the concentration per cubic meter of emission gasses calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere (units: cubic centimeters)

**Supplementary Provisions [Order of the Prime Minister's Office No.40 of June 25, 1981]**

This Order comes into effect as of the day of promulgation.

**Supplementary Provisions [Order of the Prime Minister's Office No.46 of September 30, 1981]**

This Order comes into effect as of the day of promulgation.

**Supplementary Provisions [Order of the Prime Minister's Office No.24 of May 28, 1982]**

(1) This Order comes into effect as of June 1, 1982.

- (2) The amended provisions of Appended Table 2 do not apply to a unit that has been installed as of the time this Order of the Prime Minister's Office comes into effect (including a unit for which installation work is underway) until June 30, 1984, and prior laws continue to govern this.
- (3) To apply the provisions of post-amendment Appended Table 2 to a unit as set forth in column 2 of the Appended Table of the Supplementary Provisions that has been installed as of effective date of this Order of the Prime Minister's Office (including one for which installation work is underway at that time, and excluding one for which installation work began during the period from June 24, 1971, to the day preceding the effective date of this Order of the Prime Minister's Office in an area set forth in Appended Table 5), the volume of soot and dust set forth in column 4 of that table, from July 1, 1984, until otherwise provided for by law, is the volume of soot and dust set forth in column 4 of the Appended Table of the Supplementary Provisions for the type of unit and scale set forth in column 3 of that table; provided, however, that from July 1, 1984, until June 30, 1985, the volume of soot and dust referred to in column 4 of that table for a unit as set forth in one of the following items is the volume specified in the relevant item:
- (i) a boiler as set forth in column 2 of Appended Table 1 of the Supplementary Provisions (limited to one that uses low sulfur coal as the main fuel and has an emission gas volume (meaning the maximum volume of emission gases per hour when calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere; the same applies hereinafter in this Table) of 200,000 cubic meters or more): 0.25 grams
  - (ii) a calcination furnace as set forth in column 2 of row 6 of the Appended Table of the Supplementary Provisions that is used for the manufacture of petroleum coke (limited to one that has an emission gas volume of 40,000 cubic meters or more): 0.27 grams
- (4) Notwithstanding the provisions of the amended Appended Table 2, from July 3, 1995, until otherwise provided for by law, the soot and dust emission standard under the provisions of Article 3, paragraph (1) of the Air Pollution Control Act (Act No. 97 of 1968; hereinafter referred to as "the Act") associated with a boiler as set forth in row 1 of Appended Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") that burns coal and that has been installed as of the effective date of this Order of the Prime Minister's Office (limited to one that burns only coal with a calorific value of 20,930.25 kilojoules or less per kilogram during the period from the effective date of this Order until July 2, 1995, or that only burns coal with a calorific value of 23,023.275 kilojoules or less per kilogram from July 3, 1995) is a volume of 0.45



grams of soot and dust per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere. In such a case, the volume of that soot and dust is the volume of soot and dust calculated using the following formula, and the volume of that soot and dust is not considered to include soot and dust emitted in the case of ignition of fuel, maintaining the fire layer for removing ash or cleaning soot (limited to that emitted during a period not exceeding a total of six minutes per hour), and is the average volume of a single process in a unit where the volume of soot and dust fluctuates significantly.

$$C=(15/(21-O_s))\cdot C_s$$

(In this equation, C, O<sub>s</sub>, and C<sub>s</sub> represent the following values:

C: the volume of soot and dust (units: grams)

O<sub>s</sub>: the concentration of oxygen in the emission gases (this is set at 20 percent if the concentration exceeds 20 percent) (units: percentage)

C<sub>s</sub>: the volume of soot and dust measured using the method specified by Japan Industrial Standard Z8808 (units: grams))

- (5) Notwithstanding the post-amendment provisions of Appended Table 2, from July 1, 1984, the emission standard for soot and dust under the provisions of Article 3, paragraph (1) of the Act for a unit set forth the following items for which installation work began in an area as set forth in Appended Table 5 during the period from June 24, 1971, to the day preceding the effective date of this Order of the Prime Minister's Office is the volume of soot and dust set forth in pre-amendment column 5 of Appended Table 2 per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in column 2 of that table and scale set forth in column 3 of that table.
- (i) a boiler as set forth in column 2 of row 3 of amended Appended Table 2 (limited to one that has an emission gas volume of less than 200,000 cubic meters)
  - (ii) a calcination furnace as set forth in column 2 of row 12 of amended Appended Table 2 (limited to one that has an emission gas volume of less than 40,000 cubic meters)
  - (iii) a blast furnace as set forth in column 2 of row 14 and row 40 of the amended Appended Table 2 (limited to one that has an emission gas volume of 40,000 cubic meters or more)
  - (iv) an aggregate drying kiln as set forth in column 2 of row 31 of amended Appended Table 2 (limited to a direct hot-air drying kiln)
  - (v) a drying furnace as set forth in column 2 of row 32 and row 43 of amended Appended Table 2 (limited to a direct hot-air drying kiln that has an emission gas volume of 40,000 cubic meters or more)
  - (vi) a converter furnace as set forth in column 2 of row 41 of amended

- Appended Table 2 (excluding one of combustion type)
- (vii) a unit as set forth below that uses electricity as a heat source:
    - (a) a unit as set forth in column 2 of row 30 of amended Appended Table 2 (limited to one that has an emission gas volume of 40,000 cubic meters or more)
    - (b) a drying furnace as set forth in column 2 of row 32 of amended Appended Table 2 (limited to one that has an emission gas volume of 40,000 cubic meters or more)
- (6) Notwithstanding the post-amendment provisions of Appended Table 2, the emission standard for soot and dust under the provisions of Article 3, paragraph (1) of the Act for a unit for which installation work began in an area as set forth in Appended Table 5 during the period from June 24, 1971, to the day preceding the effective date of this Order of the Prime Minister's Office (excluding one as prescribed in the two preceding paragraphs) that is as set forth the following items is the stricter of either the permissible limit according to the soot and dust emission standard under the pre-amendment provisions of Article 3, paragraph (3) of the Act for that unit or the permissible limit according to the soot and dust emission standard under the post-amendment provisions of Article 3, paragraph (1) of the Act for that unit; provided, however, that, during the period provided for in the relevant paragraph for the soot and dust emission standard under the provisions of Article 3, paragraph (1) of the Act for a unit prescribed in paragraph (8) or paragraph (10) of the Supplementary Provisions is the volume of soot and dust set forth in pre-amendment column 5 of Appended Table 2 per cubic meter of emission gases calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere, for each type of unit set forth in column 2 of that table and scale set forth in column 3 of that table.
- (i) a boiler as set forth in column 2 of row 1 of amended Appended Table 2 (limited to one that has an emission gas volume of 40,000 cubic meters or more)
  - (ii) a boiler as set forth in column 2 of row 2, row 5 and row 6 of amended Appended Table 2
  - (iii) a boiler as set forth in column 2 of row 4 of amended Appended Table 2 (limited to one that has an emission gas volume of less than 200,000 cubic meters)
  - (iv) a heating furnace as set forth in column 2 of row 8, row 18 and row 19 of amended Appended Table 2
  - (v) a combustion furnace as set forth in column 2 of row 21 of amended Appended Table 2
  - (vi) a kiln as set forth in column 2 of row 22 to row 26 of amended Appended Table 2 (limited to one that has an emission gas volume of 40,000 cubic

- meters or more if it is used for the manufacture of cement)
- (vii) a melting furnace as set forth in column 2 of row 27 of amended Appended Table 2 (limited to one that has an emission gas volume of 40,000 cubic meters or more)
  - (viii) a melting furnace set forth in column 2 of row 28 and row 29 of amended Appended Table 2 (limited to one other than a crucible furnace; and if it is used in the manufacture of optical glass, electric glass or frit, excluding one that has emission gas volume of less than 40,000 cubic meters)
  - (ix) a unit set forth in column 2 of row 30 of amended Appended Table 2
  - (x) an aggregate drying kiln as set forth in column 2 of row 31 of amended Appended Table 2
  - (xi) a drying furnace as set forth in column 2 of row 32 and 43 of amended Appended Table 2
  - (xii) a continuous furnace as set forth in column 2 of row 36 of Appended Table 2 before its amendment by Article 1 of the Order of the Prime Minister's Office Partially Amending the Regulation for Enforcement of the Air Pollution Control Act, etc. (Order of the Prime Minister's Office No.27 of 1998)
  - (xiii) a waste incinerator as set forth in column 2 of row 37 of Appended Table 2 before its amendment by Article 1 of the Order of the Prime Minister's Office Partially Amending the Regulation for Enforcement of the Air Pollution Control Act, etc. (Order of the Prime Minister's Office No.27 of 1998)
  - (xiv) a drying furnace as set forth in column 2 of row 48 of amended Appended Table 2 (limited to one that has an emission gas volume of 40,000 cubic meters or more)
- (7) To apply the post-amendment provisions of Appended Table 2 to a reactor furnace as set forth in row 10 of Appended Table 1 of the Cabinet Order that is used in the manufacture of activated carbon (limited to one that has an emission gas volume of less than 10,000 cubic meters), the volume of soot and dust set forth in column 5 of row 30 of that table is 0.15 grams until otherwise provided for by law.
- (8) To apply the post-amendment provisions of Appended Table 2 to a unit as set forth in the following items, the "On" in the formula in Remark 1 of that table is the same value as the "Os" until otherwise provided for by law (or from July 1, 1984 until otherwise provided for by law, for a unit that has been installed as of the time this Order of the Prime Minister's Office comes into effect (including a unit for which installation work is underway at that time)).
- (i) a boiler as set forth in column 2 of row 2 of amended Appended Table 2 (limited to one that has an emission gas volume of less than 10,000 cubic meters)

- (ii) a boiler as set forth in column 2 of row 6 of amended Appended Table 2
- (iii) a heating furnace as set forth in column 2 of row 18 of amended Appended Table 2
- (iv) a kiln as set forth in column 2 of row 26 of amended Appended Table 2
- (v) a unit set forth in column 2 of row 30 of amended Appended Table 2
- (9) To apply the post-amendment provisions of Appended Table 2 to a boiler as set forth in column 2 of row 2 of that table (limited to one with an emission gas volume of 10,000 cubic meters or more and less than 40,000 cubic meters, and excluding one as set forth in the following paragraph), the "On" in the formula in Remark 1 of that table is the same value as the "Os" until June 30, 1985.
- (10) To apply the post-amendment provisions of Appended Table 2 to a boiler as set forth in column 2 of row 2 of that table (limited to one that has been installed as of the effective date of this Order of the Prime Minister's Office (including a unit for which installation work is underway at that time) that has an emission gas volume of 10,000 cubic meters or more and less than 200,000 cubic meters), the "On" in the formula in Remark 1 of that table is the same value as the "Os" from July 1, 1984, until June 30, 1985.
- (11) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Order of the Prime Minister's Office comes into effect.

Appended Table of the Supplementary Provisions

(i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that exclusively burn heavy oils and other liquid fuel (excluding black liquid generated in association with the manufacture or paper pulp; the same applies below) and those that burn a mixture of gas and liquid fuel (limited to those that have emission gas volumes of 40,000 cubic meters or more, and excluding those listed in row 4)	Emission gas volumes of 200,000 cubic meters or more	0.07 grams
		Emission gas volumes of less than 200,000 cubic meters	0.18 grams

(i i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that exclusively burn black liquid generated in association with the manufacture of paper pulp and those that burn a mixture of black liquid generated in association with the manufacture of paper pulp and gas or liquid fuel (excluding those listed in the row 4)	Emission gas volumes of 200,000 cubic meters or more	0.20 grams
		Emission gas volumes of less than 200,000 cubic meters	0.35 grams
(i ii )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal (limited to those with a calorific value of 20,930.25 kilojoules or less per kilogram) (excluding those listed in the following row)	Emission gas volumes of 200,000 cubic meters or more	0.15 grams
		Emission gas volumes of 40,000 cubic meters or more and less than 200,000 cubic meters	0.25 grams
		Emission gas volumes of less than 40,000 cubic meters	0.35 grams
(i v )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that are catalytic regeneration towers listed in the middle column of row 8 of the same table		0.30 grams

( v )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that are listed in the preceding rows (limited to those that have emission gas volumes of less than 40,000 cubic meters, and excluding those that exclusively burn gas, exclusively burn liquid fuel, those that burn a mixture of gas and liquid fuel, and those that burn coal (limited to those with a calorific value of 20,930.25 kilojoules or less per kilogram)		0.40 grams
(v i)	Calcination furnaces listed in row 3 of Appended Table 1 of the Cabinet Order	Emission gas volumes of 40,000 cubic meters or more	0.25 grams
		Emission gas volumes of less than 40,000 cubic meters	0.30 grams
( v ii )	Converter furnaces listed in row 4 of Appended Table 1 of the Cabinet Order (limited to those of combustion type)		0.13 grams
( v ii i)	Blast furnaces listed in row 5 of Appended Table 1 of the Cabinet Order that are reverberating furnaces for the manufacture of aluminum metal or alloy or recycling of aluminum (limited to those with emission gas volumes of less than 40,000 cubic meters)		0.30 grams
(i x )	Heating furnaces listed in row 6 of Appended Table 1 of the Cabinet Order	Emission gas volumes of 40,000 cubic meters or more	0.15 grams
		Emission gas volumes of less than 40,000 cubic meters	0.25 grams
( x )	Heating furnaces listed in row 7 of Appended Table 1 of the Cabinet Order are used for the manufacture of lubrication oil (limited to those that have emission gas volumes of less than 10,000 cubic meters)		0.18 grams

( x i)	Catalytic regeneration towers listed in row 8 of Appended Table 1 of the Cabinet Order		0.30 grams
( x ii )	Blast furnaces listed in row 9 of Appended Table 1 of the Cabinet Order are used for the manufacture of optical glass, electric glass or frit (limited to those that have emission gas volumes of less than 40,000 cubic meters)		0.30 grams
( x ii i)	Reacting furnaces listed in row 10 of Appended Table 1 of the Cabinet Order are used for the manufacture of activated carbon (limited to those that have emission gas volumes of less than 10,000 cubic meters)		0.30 grams
( x i v )	Drying furnaces listed in row 11 of Appended Table 1 of the Cabinet Order that are aggregate drying kilns (limited to those that have emission gas volumes of less than 20,000 cubic meters)		0.60 grams
( x v )	Drying furnaces listed in row 11 of Appended Table 1 of the Cabinet Order other than aggregate drying kilns (limited to those that have emission gas volumes of less than 40,000 cubic meters)	Emission gas volume of 10,000 cubic meters or more	0.30 grams
		Emission gas volumes of less than 10,000 cubic meters	0.35 grams
( x v i)	Blast furnaces listed in row 14 of Appended Table 1 of the Cabinet Order (limited to those that have emission gas volumes of less than 10,000 cubic meters)		0.30 grams
( x v ii )	Drying furnaces listed in row 14 of Appended Table 1 of the Cabinet Order (limited to those that are air blown type in the case of those that have emission gas volumes of 40,000 cubic meters or more)	Emission gas volumes of 40,000 cubic meters or more	0.18 grams

	Emission gas volumes of less than 40,000 cubic meters	0.30 grams
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**Supplementary Provisions [Order of the Prime Minister's Office No.32 of July 3, 1982]**

This Order of the Prime Minister's Office comes into effect as of the day of promulgation.

However, the amended provisions of Article 13, paragraph (1) come into effect as of January 1, 1983.

**Supplementary Provisions [Order of the Prime Minister's Office No.25 of September 7, 1983]**

- (1) This Order of the Prime Minister's Office comes into effect as of September 10, 1983.
- (2) The amended provisions of Appended Table 3-2 do not apply to a unit as set forth in one of the following items that were installed at the time this Order of the Prime Minister's Office comes into effect (including a unit for which installation work is underway at that time and excluding one provided for in paragraph (4)) until the date set forth in that item, and prior laws continue to govern this.
  - (i) a unit as set forth in row 5 of Appended Table 2 of the Supplementary Provisions (limited to one that has an emission gas volume (meaning the maximum volume of emission gases per hour when calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere; the same applies hereinafter in this Table) of less than 5,000 cubic meters: August 9, 1984
  - (ii) a unit as set forth in row 3 of Appended Table 2 of the Supplementary Provisions or a unit set forth in row 5 of that table that has an emission gas volume of 5,000 cubic meters or more and less than 200,000 cubic meters: September 9, 1985
  - (iii) a boiler as set forth in row 1 of Appended Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") (excluding a boiler as set forth in the following item): September 9, 1984
- (3) To apply the post-amendment provisions of Appended Table 3-2 to a boiler as set forth in row 1 of Appended Table 1 of the Cabinet Order that burns solid fuel (limited to one that has an emission gas volume of 5,000 cubic meters or more) for which installation work began during the period from August 10, 1973, to December 9, 1975, the volume of nitrogen oxides set forth in column 4



of that table, from September 10, 1984, until otherwise provided for by law, is 300 cubic centimeters for one with an emission gas volume of 500,000 cubic meters or more, 350 cubic centimeters for one with an emission gas volume of 40,000 cubic meters or more and less than 500,000 cubic meters, and 380 centimeters for one with an emission gas volume of less than 40,000 cubic meters.

- (4) Notwithstanding the provisions of the preceding paragraph, to apply the post-amendment provisions of Table 3-2 to a boiler as set forth in row 1 of Appended Table 1 of the Cabinet Order for which installation work began during the period from August 10, 1973, to December 9, 1975 that is of the recycled heat extraction-condensing natural circulation type (limited to one that has an emission gas volume of 500,000 cubic meters or more and less than 700,000 cubic meters, that has a furnace heat release rate of 837,210 kilojoules or more per cubic meters per hour during maximum continuous evaporation) if it starts to be made to burn solid fuel (limited to one that has an emission gas volume of 500,000 cubic meters or more and less than 700,000 cubic meters, that has a furnace heat release rate of 837,210 kilojoules or more per cubic meters per hour during maximum continuous evaporation) during the period from the effective date of this Order of the Prime Minister's Office to December 31, 1984 (or if installation work has begun on this) the volume of nitrogen oxides set forth in column 4 of that table is 420 cubic centimeters from the date of completion of the work to perform the change until otherwise provided for by law.
- (5) To apply the post-amendment provisions of Appended Table 3-2 to a boiler as set forth in row 1 of Appended Table 1 of the Cabinet Order that burns solid fuel (limited to one that has an emission gas volume of 5,000 cubic meters or more) and for which installation work began during the period from December 10, 1975, to June 17, 1977, the volume of nitrogen oxides set forth in column 4 of that table, from September 10, 1984, until otherwise provided for by law, is 300 cubic centimeters for one with an emission gas volume of 40,000 cubic meters or more and 350 centimeters for one with an emission gas volume of less than 40,000 cubic meters.
- (6) To apply the post-amendment provisions of Appended Table 3-2 to a boiler that is as set forth in row 1 of Appended Table 1 of the Cabinet Order, for which installation work begins during the period from June 18, 1977, to August 9, 1979, and that burns solid fuel, the volume of nitrogen oxides set forth in column 4 of that table, from September 10, 1984, until otherwise provided for by law, is 300 cubic centimeters for one with an emission gas volume of 40,000 cubic meters or more, 350 cubic centimeters for one with an emission gas volume of 5,000 cubic meters or more and less than 40,000 cubic meters, and 380 centimeters for one with an emission gas volume of less than 5,000 cubic

meters.

- (7) To apply the post-amendment provisions of Appended Table 3-2 to a unit set forth in column 2 of Appended Table 1 of the Supplementary Provisions for which installation work began during the period from August 10, 1979, to the day preceding the effective date of this Order of the Prime Minister's Office, the volume of nitrogen oxides set forth in column 4 of that table, from September 10, 1984, until otherwise provided for by law, is the volume of nitrogen oxides set forth in column 4 of Appended Table 1 of the Supplementary Provisions for each type of unit and scale set forth in column 3 of Appended Table 1 of the Supplementary Provisions.
- (8) To apply the post-amendment provisions of Appended Table 3-2 to a unit set forth in column 2 of Appended Table 2 of the Supplementary Provisions that has been installed as of the effective date of this Order of the Prime Minister's Office other than one as set forth in the following items, the volume of nitrogen oxides set forth in column 4 of that table, from September 10, 1984 (or from August 10, 1984 for a unit as set forth in paragraph (2), item (i); or from September 10, 1985 for a unit as set forth in paragraph (2), item (ii) and the effective date of this Order of the Prime Minister's Office for a unit set forth in row 6 and row 7 of Appended Table 2 of the Supplementary Provisions) until otherwise provided for by law, is the volume of nitrogen oxides set forth in column 4 of Appended Table 2 of the Supplementary Provisions for each type of unit and scale set forth in column 3 of that table.
- (i) a unit prescribed in paragraph (3) to paragraph (7)
  - (ii) a unit as referred to in Appended Table 1 of the Cabinet Order for which installation work began during the period from August 10, 1979, until the day preceding the effective date of this Order of the Prime Minister's Office and that is as set forth below.
    - (a) a melting furnace as set forth in row 14 of Appended Table 1 of the Cabinet Order constituting a zinc and cadmium rectification furnace used for refining zinc (limited to one that burns liquid petroleum gas or coke furnace gas)
    - (b) a reverberating furnace as set forth in row 26 of Appended Table 1 of the Cabinet Order
- (9) To apply the post-amendment provisions of Appended Table 3-2 to a boiler as set forth in row 1 of Appended Table 1 of the Cabinet Order that burns coal and is of the scattered stoker type (limited to one that has an emission gas volume of 40,000 cubic meters or more and less than 100,000 cubic meters), the volume of nitrogen oxides set forth in column 4 of that table is 320 cubic centimeters until otherwise provided for by law.
- (10) To apply the post-amendment provisions of Appended Table 3-2 to a boiler as set forth in row 1 of Appended Table 1 of the Cabinet Order that burns solid

fuel (limited to one that has an emission gas volume of 40,000 cubic meters or more, and excluding one as provided in the preceding paragraph) for which installation work begins during the period from the effective date of this Order of the Prime Minister's Office until March 31, 1987, the volume of nitrogen oxides set forth in column 4 of that table is 300 cubic centimeters.

- (11) To apply the post-amendment provisions of Appended Table 3-2 to a boiler as set forth in row 1 of Appended Table 1 of the Cabinet Order that burns solid fuel and is of fluid layer combustion type (limited to one that has an emission gas volume of less than 40,000 cubic meters) for which installation work begins during the period from the effective date of this Order of the Prime Minister's Office until September 9, 1984, the volume of nitrogen oxides set forth in column 4 of that table is 360 cubic centimeters until otherwise provided for by law.
- (12) To apply the post-amendment provisions of Appended Table 3-2 to a boiler as set forth in row 1 of Appended Table 1 of the Cabinet Order that burns solid fuel (limited to one that has an emission gas volume of less than 40,000 cubic meters, and excluding those prescribed in the preceding paragraph) for which installation work begins after the effective date of this Order of the Prime Minister's Office, the volume of nitrogen oxides set forth in column 4 of that table is 350 cubic centimeters until otherwise provided for by law.
- (13) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Order of the Prime Minister's Office comes into effect.

Appended Table 1 of the Supplementary Provisions

(i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that exclusively burn coal and are of fluid layer combustion type (limited to those that have emission gas volumes of 5,000 cubic meters or more and less than 40,000 cubic meters, and exclusively burn coal as of the effective date of this Order of the Prime Minister's Office)	Emission gas volumes of 10,000 cubic meters or more	380 cubic centimeters
		Emission gas volumes of less than 10,000 cubic meters	390 cubic centimeters

(i) i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel (excluding those listed in the preceding row)	Emission gas volumes of 40,000 cubic meters or more	300 cubic centimeters
		Emission gas volumes of 5,000 cubic meters or more and less than 40,000 cubic meters	350 cubic centimeters
		Emission gas volumes of less than 5,000 cubic meters	380 cubic centimeters

Appended Table 2 of the Supplementary Provisions

( i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that exclusively burn low-grade coal (meaning coal with a calorific value of 20,930.25 kilojoules or less per kilogram; the same applies hereinafter) and have a furnace separating wall radiant superheater (limited to those that have an emission gas volumes of 500,000 cubic meters or more, a furnace heat release rate of 586,047 kilojoules or more per cubic meter per hour during maximum continuous evaporation, and exclusively burn low-grade coal as of the effective date of this Order of the Prime Minister's Office)		550 cubic centimeters
( i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that exclusively burn low-grade coal (limited to those that have emission gas volumes of 300,000 cubic meters or more and, and exclusively burn low-grade coal as of the effective date of this Order of the Prime Minister's Office, other than those listed in the preceding row)		480 cubic centimeters

( i i i )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that exclusively burn coal and are of natural circulation type using the front-fired method (limited to those that have an emission gas volume of 20,000 cubic meters or more and less than 250,000 cubic meters, a furnace heat release rate of 586,047 kilojoules or more per cubic meter per hour during maximum continuous evaporation, and exclusively burn coal as of the effective date of this Order of the Prime Minister's Office)		450 cubic centimeters
( i v )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that exclusively burn coal and have a tangentially-fired tilting burner (limited to those that have emission gas volumes of 1,000,000 cubic meters or more and exclusively burn coal as of the effective date of this Order of the Prime Minister's Office, excluding those listed in row 1 and row 2.)		430 cubic centimeters
( v )	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn solid fuel (excluding those listed in the preceding rows)	Emission gas volumes of 700,000 cubic meters or more	400 cubic centimeters
Emission gas volumes of 200,000 cubic meters or more and less than 700,000 cubic meters		420 cubic centimeters	
Emission gas volumes of 5,000 cubic meters or more and less than 200,000 cubic meters		450 cubic centimeters	
Emission gas volumes of less than 5,000 cubic meters		480 cubic centimeters	

( v i )	Melting furnaces listed in row 14 of Appended Table 1 of the Cabinet Order that are zinc and cadmium rectification furnaces used for refining zinc (limited to those that burn liquid petroleum gas or coke furnace gas)		200 cubic centimeters
( v i i )	Reverberating furnaces listed in row 26 of Appended Table 1 of the Cabinet Order		200 cubic centimeters

**Supplementary Provisions [Order of the Prime Minister's Office No.31 of June 6, 1985]**

- (1) This Order of the Prime Minister's Office comes into effect as of September 10, 1985.
- (2) Until otherwise provided for by law, the provisions from Article 3 to Article 5 do not apply to a boiler as set forth in row 1 of Appended Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") that has a heat conductive area calculated according to the provisions of Article 2 of less than ten square meters (hereinafter referred to as a "small boiler") for which installation work began prior to the effective date of this Order of the Prime Minister's Office.
- (3) The provisions of Article 3 and Article 7, paragraph (1) do not apply to a small boiler for which installation work to replace a unit prescribed in the preceding paragraph began during the period from the effective date of this Order of the Prime Minister's Office until September 9, 1988.
- (4) Until otherwise provided for by law, the provisions of Article 4, Article 5 and Article 7, paragraph (2) do not apply to a small boiler for which installation work began after the effective date of this Order of the Prime Minister's Office that exclusively burns gas, exclusively burns light liquid fuel (meaning kerosene, diesel oil, or fuel oil A; the same applies hereinafter), or burns a mixture of gas and light liquid fuel.
- (5) Until otherwise provided for by law, to apply the provisions of Article 7-3, paragraph (3) and Article 7-4, paragraph (3) to a specified factory or place of business as prescribed in Article 5-2, paragraph (1) of the Air Pollution Control Act that has been equipped with a small boiler (limited to one for which installation work began before the enforcement of this Order of the Prime Minister's Office), the term "date specified by the prefectural governor" in

those provisions is read as "date specified by the prefectural governor (in the case of a boiler as set forth in row 1 of Appended Table 1 of the Cabinet Order that have a heat conductive area of less than ten square meters, September 9, 1985)".

- (6) Until otherwise provided for by law, to apply the provisions of Appended Table 2 to a small boiler for which installation work began during the period from the effective date of this Order of the Prime Minister's Office until September 9, 1990, the volume of soot and dust set forth in column 4 of that table is 0.50 grams and the volume of soot and dust set forth in column 5 of that table is 0.30 grams.
- (7) Until otherwise provided for by law, to apply the post-amendment provisions of Appended Table 3-2 to a small boiler for which installation work began during the period from the effective date of this Order of the Prime Minister's Office until September 9, 1990, that burns liquid fuel other than light liquid fuel (excluding one that burns solid fuel), the volume of nitrogen oxides set forth in column 4 of that table is 300 cubic centimeters.

**Supplementary Provisions [Order of the Prime Minister's Office No.53 of November 6, 1987]**

- (1) This Order of the Prime Minister's Office comes into effect as of February 1, 1988.
- (2) Until otherwise provided for by law, the provisions of Article 3 to Article 5 and Article 7 do not apply to a gas turbine as set forth in row 29 of Appended Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") (hereinafter referred to as a "gas turbine") or diesel engine as set forth in row 30 of that table (hereinafter referred to as a "diesel engine") that is only used in emergencies (hereinafter referred to as an "emergency unit").
- (3) Until otherwise provided for by law, to apply the provisions of Article 7-2 to a case in which a factory or place of business that has in place an emergency unit is specified as being of the scale to become a specified factory or place of business prescribed in Article 5-2, paragraph (1) of the Air Pollution Act (hereinafter referred to as the "Act") (hereinafter referred to as a "specified factory or place of business"), the term "a unit generating soot or smoke" is read as "a unit generating soot or smoke (excluding those that are gas turbines set forth in row 29 of Appended Table 1 of the Cabinet Order and diesel engines set forth in row 30 of that table that are only used in emergencies)".
- (4) Until otherwise provided for by law, to apply the provisions of Article 7-3 and Article 7-4 to a factory or place of business that has an emergency unit installed and that becomes a specified factory or place of business, the term "a

unit generating soot or smoke" is read as "a unit generating soot or smoke (excluding one constituting a gas turbine as set forth in row 29 of Appended Table 1 of the Cabinet Order or diesel engine as set forth in row 30 of that table that is only used in emergencies)".

- (5) Until otherwise provided for by law, to apply the provisions of Article 7-3, paragraph (3) and Article 7-4, paragraph (3) to a specified factory or place of business that has in place a gas turbine or diesel engine (other than an emergency unit; the same applies hereinafter), the term "date specified by the prefectural governor" in these provisions is read as "date specified by the prefectural governor (or January 31, 1988, for a gas turbine as set forth in row 29 of Appended Table 1 of the Cabinet Order or diesel engine as set forth in row 30 of that table)".
- (6) Until otherwise provided for by law, the provisions of Article 3 do not apply to a gas turbine or diesel engine for which installation work began before the entry into force of this Order the Prime Minister's Office, that has an emission gas volume (meaning the maximum volume of emission gases per hour when calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere; the same applies hereinafter) of less than 10,000 cubic meters.
- (7) Until January 31, 1991, the provisions of Article 3 do not apply to a gas turbine or diesel engine for which installation work began before the entry into force of this Order of the Prime Minister's Office, that has an emission gas volume of 10,000 cubic meters or more; provided, however, that if the same mathematical formula as the mathematical formula for the volume of sulfur oxides prescribed in Article 3 is used for the sulfur oxide emission standard in an ordinance or regulation of a local government (hereinafter referred to as an "ordinance or regulation") being applied to persons emitting into the atmosphere soot and dust generated at a diesel engine on the effective date of this Order of the Prime Minister's Office, the provisions of that Article apply to diesel engines, with the K value in the mathematical formula prescribed in paragraph (1) of that Article in an area as set forth in the middle column of Appended Table within the area of the local government being the value specified as equivalent to the K value in the formula prescribed in the same paragraph of that ordinance or regulation from February 1, 1990, until January 31, 1991.
- (8) Until otherwise provided for by law, the provisions of Article 4 and Article 5 do not apply to a gas turbine or diesel engine for which installation work began before the entry into force of this Order of the Prime Minister's Office.
- (9) Until otherwise provided for by law, to apply the post-amendment provisions of row 47 of Appended Table 3-2 to a gas turbine that exclusively burns gas (limited to one that has an emission gas volume of less than 45,000 cubic



meters) for which installation work begins during the period from the effective date of this Order of the Prime Minister's Office until July 31, 1989, the volume of nitrogen oxides set forth in column 4 of that table is 90 cubic centimeters.

- (10) Until otherwise provided for by law, to apply the post-amendment provisions of row 47 of Appended Table 3-2 to a gas turbine that burns liquid fuel (limited to one that has an emission gas volume of 45,000 cubic meters or more) for which installation work begins during the period from the effective date of this Order of the Prime Minister's Office until January 31, 1991, the volume of nitrogen oxides set forth in column 4 of that table is 100 cubic centimeters.
- (11) Until otherwise provided for by law, to apply the post-amendment provisions of row 47 of Appended Table 3-2 to a gas turbine that burns liquid fuel (limited to one that has an emission gas volume of less than 45,000 cubic meters), the volume of nitrogen oxides set forth in column 4 of that table is 120 cubic centimeters if installation work begins during the period from the effective date of this Order of the Prime Minister's Office until July 31, 1989, and 100 cubic centimeters if installation work begins during the period from August 1, 1989, until January 31, 1991.
- (12) Until otherwise provided for by law, to apply the post-amendment provisions of row 48 of Appended Table 3-2 to a diesel engine that has a cylinder inner diameter of 400 millimeters or more (limited to one that has an emission gas volume of less than 45,000 cubic meters), the volume of nitrogen oxides set forth in column 4 of that table is 600 cubic centimeters if installation work begins during the period from the effective date of this Order of the Prime Minister's Office until July 31, 1989; 400 cubic centimeters if installation work begins during the period from August 1, 1989, until January 31, 1991; and 1,200 cubic centimeters if installation work begins on or after February 1, 1991.

**Supplementary Provisions [Order of the Prime Minister's Office No.59 of December 27, 1989]**

This Order of the Prime Minister's Office comes into effect as of the day of promulgation.

**Supplementary Provisions [Order of the Prime Minister's Office No.58 of December 1, 1990]**

- (1) This Order of the Prime Minister's Office comes into effect as of February 1, 1991.
- (2) Until otherwise provided for by law, the provisions of Article 3 to Article 5 and Article 7 do not apply to a gas engine as set forth in row 31 of Appended

Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") (hereinafter referred to as a "gas engine") or gasoline engine as set forth in row 32 of that table (hereinafter referred to as a "gasoline engine") that is only used in emergencies (hereinafter referred to as an "emergency unit").

- (3) Until otherwise provided for by law, to apply the provisions of Article 7-2 to a case in which a factory or place of business that has in place an emergency unit and that is specified as being of the scale to become a specified factory or place of business prescribed in Article 5-2, paragraph (1) of the Air Pollution Act (hereinafter referred to as "the Act") (hereinafter referred to as a "specified factory or place of business"), the term "a unit generating soot or smoke" is read as "a unit generating soot or smoke (excluding one constituting a gas engine as set forth in row 31 of Appended Table 1 of the Cabinet Order or gasoline engine as set forth in row 32 of that table that is only used in emergencies)".
- (4) Until otherwise provided for by law, to apply the provisions of Article 7-3 or Article 7-4 to a factory or place of business that has in place an emergency unit and that becomes a specified factory or place of business, the term "a unit generating soot or smoke" is read as "a unit generating soot or smoke (excluding one constituting a gas engine as set forth in row 31 of Appended Table 1 of the Cabinet Order or gasoline engine as set forth in row 32 of that table that is only used in emergencies)".
- (5) Until otherwise provided for by law, to apply the provisions of Article 7-3, paragraph (3) and Article 7-4, paragraph (3) to a specified factory or place of business that has in place a gas engine or gasoline engine (excluding an emergency unit; the same applies hereinafter), the phrase "date specified by the prefectural governor" in these provisions is read as "date specified by the prefectural governor (or January 31, 1991, for a gas engine as set forth in row 31 of Appended Table 1 of the Cabinet Order or gasoline engine as set forth in row 32 of that table)".
- (6) Until otherwise provided for by law, to apply the post-amendment provisions of row 49 or row 50 of Appended Table 3-2 to gas engines or gasoline engines for which installation work began before the enforcement of this Order of the Prime Minister's Office, the volume of nitrogen oxides set forth in column 4 of the same row is 2,000 cubic centimeters.
- (7) Notwithstanding the provisions of the preceding paragraph, for the period until January 31, 1993, the provisions of row 49 and row 50 of amended Appended Table 3-2 do not apply to gas engines or gasoline engines for which installation work began before February 1, 1988.
- (8) Until otherwise provided for by law, to apply the post-amendment provisions of row 49 or row 50 of Appended Table 3-2 to a gas engine or gasoline engine

for which installation work began during the period from the effective date of this Order of the Prime Minister's Office until January 31, 1994, the volume of nitrogen oxides set forth in column 4 of that row is 1,000 cubic centimeters.

**Supplementary Provisions [Order of the Prime Minister's Office No. 49 of October 29, 1993]**

This Order of the Prime Minister's Office comes into effect as of April 1, 1994.

**Supplementary Provisions [Order of the Prime Minister's Office No.39 of June 28, 1995]**

This Order of the Prime Minister's Office comes into effect as of July 1, 1995.

**Supplementary Provisions [Order of the Prime Minister's Office No. 7 of March 29, 1996]**

(Effective Date)

- (1) This Order of the Prime Minister's Office comes into effect as of the day of promulgation.

(Transitional Measures Related to Forms)

- (2) Until otherwise provided by law, it is permissible to use the previous form for a Written Report that is based on Form No. 4 or No. 6 of the Regulation for Enforcement of the Air Pollution Control Act, Form No. 5 of the Regulation for Enforcement of the Water Pollution Control Act, Form No. 6 of the Regulation for Enforcement of the Noise Regulation Act, Form No. 6 of the Regulation for Enforcement of the Vibration Regulation Act, Form No. 4 of the Regulation for Enforcement of the Act on Special Measures for the Conservation of Lake Water Quality, or Form No. 8 of the Regulation for Enforcement of Act on Special Measures concerning Water Quality Conservation at Water Resources Area in Order to Prevent the Specified Difficulties in Water Utilization as amended by this Order of the Prime Minister's Office.

(Transitional Measures for Penal Provisions)

- (3) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Order of the Prime Minister's Office comes into effect.

**Supplementary Provisions [Order of the Prime Minister's Office No.50 of October 25, 1996]**

This Order of the Prime Minister's Office comes into effect as of the day of promulgation.

**Supplementary Provisions [Order of the Prime Minister's Office No.5 of February 6, 1997]**

This Order of the Prime Minister's Office comes into effect as of April 1, 1997.

**Supplementary Provisions [Order of the Prime Minister's Office No. 27 of April 10, 1998]**

- (1) This Order of the Prime Minister's Office comes into effect as of July 1, 1998; provided, however, that the portion adding ", once or more per year with regard to measurement associated with a unit generating soot or smoke as set forth in row 1, row 56 or row 58 of Appended Table 2" under "once or more per year" in the post-amendment provisions of Article 15 comes into effect as of the day of promulgation.
- (2) The post-amendment provisions of Appended Table 2 do not apply to a waste incinerator as set forth in row 13 of the Appended Table 1 of the Order for Enforcement of the Air Pollution Control Act (Cabinet Order No. 329 of 1968; hereinafter referred to as "Cabinet Order") that has been installed as of the effective date of this Order of the Prime Minister's Office (including a unit for which installation work is underway) from the effective date of this Order of the Prime Minister's Office until March 31, 2000.
- (3) To apply the post-amendment provisions of Appended Table 2 to a waste incinerator as set forth in row 13 of Appended Table 1 of the Cabinet Order that has been installed as of the effective date of this Order of the Prime Minister's Office (including a unit for which installation work is underway), the volume of soot and dust set forth in column 4 of that table, from April 1, 2000, until otherwise provided for by law, is the volume of soot and dust set forth in column 3 of the Appended Table of the Supplementary Provisions for each scale set forth in column 2 of that table.
- (4) Notwithstanding the provisions of the preceding paragraph, beginning on April 1, 2000, the soot and dust emission standard under the provisions of Article 3, paragraph (1) of the Air Pollution Control Act (Act No. 97 of 1968; hereinafter referred to as "the Act") for a waste incinerator as set forth in row 13 of Appended Table 1 of the Cabinet Order for which installation work began in an area as set forth in Appended Table 5 during the period from June 24, 1971, until the day preceding the effective date of this Order of the Prime Minister's Office is the stricter of either the permissible limit for that unit

under the soot and dust emissions standards under the pre-amendment provisions of Article 3, paragraph (3) of the Act or the permissible limit for that unit under the soot and dust emissions standards under the post-amendment provisions of Article 3, paragraph (1) of the Act.

Appended Table of the Supplementary Provisions

Waste incinerators listed in row 13 of Appended Table 1 of the Cabinet Order	Incineration capacity of 4,000 kilograms or more per hour	0.08 grams
	Incineration capacity of 2,000 kilograms or more and less than 4,000 kilograms per hour	0.15 grams
	Incineration capacity of less than 2,000 kilograms per hour	0.25 grams

**Supplementary Provisions [Order of the Prime Minister's Office No. 26 of March 31, 1999]**

- (1) This Order of the Prime Minister's Office comes into effect as of October 1, 1999.
- (2) A document that is based on a form from before the amendment by this Order of the Prime Minister's Office and that exists on the effective date of this Order of the Prime Minister's Office may be used until otherwise provided for by law.

**Supplementary Provisions [Order of the Prime Minister's Office No. 7 of February 8, 2000] [Extract]**

(Effective Date)

Article 1 This Order of the Prime Minister's Office comes into effect as of April 1, 2000.

**Supplementary Provisions [Order of the Prime Minister's Office No.94 of August 14, 2000] [Extract]**

- (1) This Order of the Prime Minister's Office comes into effect as from the effective date (January 6, 2001) of the Act Partially Amending the Cabinet Act (Act No. 88 of 1999).

**Supplementary Provisions [Order of the Ministry of the Environment No. 15 of May 15, 2002]**

- (1) This Ministerial Order comes into effect as from the day of promulgation.
- (2) Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Ministerial Order enters into effect.

**Supplementary Provisions [Order of the Ministry of the Environment No. 5 of March 25, 2003]**

- (1) This Ministerial Order comes into effect as from the day of promulgation.

**Supplementary Provisions [Order of the Ministry of the Environment No.14 of June 10, 2005]**

- (1) This Ministerial Order comes into effect as of April 1, 2006.
- (2) The provisions of Article 15-2 do not apply to a unit set forth in the middle column of the Appended Table 5-2 that has been installed as the effective date of this Ministerial Order (including a unit for which installation work is underway) from the effective date of this Ministerial Order until March 31, 2010.
- (3) During the period from April 1, 2010, until otherwise provided for by law, to apply the provisions of row 2 of Appended Table 5-2 to a unit as set forth in that row that has been installed as of the effective date of this Ministerial Order (including a unit for which installation work is underway), the volume of volatile organic compounds set forth in the right-hand column of that row is 700 cubic centimeters.
- (4) From April 1, 2010, until otherwise provided for by law, the provisions of Article 15-2 apply to a unit set forth in the middle column of row 11 of Appended Table 5-2 that has been installed as of the effective date of this Ministerial Order (including a unit for which installation work is underway) if the capacity is 2,000 kiloliters or more.

**Supplementary Provisions [Order of the Ministry of the Environment No. 20 of September 20, 2005]**

(Effective Date)

Article 1 This Ministerial Order comes into effect as of October 1, 2005.

(Transitional Measures for Dispositions, Applications, and Other Actions)

Article 2 (1) A registration or other such disposition or a notice or other such action that the Minister for the Environment has taken pursuant to the provisions of laws and regulations before this Ministerial Order comes into effect (limited to one that involves the authority delegated to the head of a regional environmental affairs office pursuant to the provisions of one of the Ministerial Orders amended by this Ministerial Order; hereinafter referred to as a "disposition or equivalent action") is deemed to be a disposition or equivalent action that the corresponding head of a regional environmental affairs office has taken, and the filing of an application or notification or other such action that has been taken with the Minister of the Environment pursuant to the provisions of laws and regulations before the this Ministerial Order enters into effect (limited to one that involves the authority delegated to the head of a regional environmental affairs office pursuant to the provisions of one of the Ministerial Orders amended by this Ministerial Order; hereinafter referred to as the "filing of an application or equivalent action") is deemed to be the filing of an application or equivalent action with the corresponding head of a regional environmental affairs office.

(2) Something that, before this Ministerial Order comes into effect, a person must report to, file a notification of, submit to, or undertake any other such procedures for with the Ministry of the Environment pursuant to laws and regulations (limited to something that involves the authority delegated to the head of a regional environmental affairs office pursuant to the provisions of one of the Ministerial Orders amended by this Ministerial Order) but for which those procedures have not been undertaken before this Ministerial Order comes into force, is deemed to be something that a person must report to, file a notification of, submit to, or undertake any other such procedure for with the corresponding head of a regional environmental affairs office pursuant the relevant provisions of laws and regulations but for which those procedures have not been undertaken; and the relevant provisions of laws and regulations apply.

(Transitional Measures for Penal Provisions)

Article 3 Prior laws continue to govern the applicability of penal provisions to actions that a person takes before this Ministerial Order enters into effect.

**Supplementary Provisions [Order of the Ministry of the Environment  
No.34 of December 21, 2005]**

This Ministerial Order comes into effect as of March 1, 2006.

**Supplementary Provisions [Order of the Ministry of the Environment No.**

**25 of August 11, 2006]**

This Ministerial Order comes into effect as of the effective date (October 1, 2006) of the Act Partially Amending the Air Pollution Control Act for Preventing Asbestos Health Damage (Act No. 5 of 2006).

**Supplementary Provisions [Order of the Ministry of the Environment No. 11 of April 20, 2007]**

(Effective Date)

Article 1 This Ministerial Order comes into effect as from the day of promulgation.

(Transitional Measures)

Article 2 (1) A certificate that is based on a format from before the amendment by this Order and that exists at the time this Order enters into effect is deemed to be based on the format from after the amendment by this Ministerial Order.

(2) Until otherwise provided for by law, a document that has been created using a format from before the amendment by this Order and that exists at the time this Order enters into effect may be used by repairing this after this Ministerial Order enters into effect.

**Supplementary Provisions [Order of the Ministry of the Environment No.15 of August 4, 2010]**

This Ministerial Order comes into effect as from the day of promulgation prescribed in the proviso of Article 1 of the Supplementary Provisions of the Act Partially Amending the Air Pollution Control Act and the Water Pollution Control Act (August 10, 2010); provided, however, that the provisions set forth in the following items come into effect as from the days specified in each item.

(i) the post-amendment provisions of Remark 1 of Appended Table 3 (excluding the post-amendment provisions deleting "that are the ortho-toluidine method or the continuous analysis method") and post-amendment provisions of Remark 2 of that table: The date of promulgation

(ii) the post-amendment provisions of Remark 1 of Appended Table 3 (limited to the post-amendment provisions deleting "that are the ortho-toluidine method or the continuous analysis method"): October 1, 2010.

**Supplementary Provisions [Order of the Ministry of the Environment No. 3 of March 16, 2011]**



(Effective Date)

Article 1 This Ministerial Order comes into effect as from the effective date (April 1, 2011) of the Act Partially Amending the Air Pollution Control Act and the Water Pollution Control Act (Act No. 31 of 2010).

(Transitional Measures Related to Forms)

Article 2 A certificate that is based on Form No. 8 of the Regulation for Enforcement of the Air Pollution Control Act from before its amendment by this Ministerial Order and that has been issued before the this Ministerial Order enters into effect is deemed to be a certificate under the Regulation for Enforcement of the Air Pollution Control Act after its amendment by this Ministerial Order; a certificate that is based on Form No. 11 of the Regulation for Enforcement of the Water Pollution Control Act from before its amendment by this Ministerial Order and that has been issued before the this Ministerial Order enters into effect is deemed to be a certificate under the Regulation for Enforcement of the Water Pollution Control Act after its amendment by this Ministerial Order.

**Supplementary Provisions [Order of the Ministry of the Environment No. 4 of March 6, 2013]**

This Ministerial Order comes into effect as from the day of promulgation.

**Supplementary Provisions [Order of the Ministry of the Environment No. 24 of December 19, 2013]**

This Ministerial Order comes into effect as from the effective date of the Act on Arrangement of Relevant Acts for Prevention of Environmental Pollution Caused by Radioactive Materials (December 20, 2013).

**Supplementary Provisions [Order of the Ministry of the Environment No.15 of May 7, 2014]**

(Effective Date)

(1) This Ministerial Order comes into effect as from the effective date of the Act Partially Amending the Air Pollution Control Act.

(Transitional Measures)

(2) To apply the provisions of Appended Table No. 7 as amended by this Ministerial Order to work emitting or dispersing specified particulates being

carried out at the time of enforcement of this Ministerial Order, the term "for the first time" in (c) and (f) of the right-hand column of row 1 of that table is deemed to read "for the first time after enforcement of this Ministerial Order."

- (3) To apply the provisions of Article 16-6 to construction work involving demolition, remodeling, or renovation being performed at the time of enforcement of this Ministerial Order, "by the commencement of construction work involving demolition, remodeling, or renovation (if the construction work involving demolition, remodeling, or renovation falls under Specified Work and the work emitting or dispersing specified particulates in association with that work is performed within 14 days of the date of commencement of that work, by 14 days before the commencement of that work)" in that Article is deemed to read "promptly after the enforcement of this Ministerial Order."

**Supplementary Provisions [Order of the Ministry of the Environment No. 22 of September 26, 2016]**

(Effective Date)

Article 1 This Ministerial Order comes into effect as from the effective date of the Act Partially Amending the Air Pollution Control Act (Act No. 41 of 2015).

(Transitional Measures)

Article 2 (1) until otherwise provided for by law, the provisions of Article 16-11 of the Regulation for Enforcement of the Air Pollution Control Act after its amendment by this Ministerial Order (hereinafter referred to as "the new Regulation ") to a unit emitting mercury that has been installed as of the effective date of this Ministerial Order (including one for which installation work has begun) are applied in accordance with the volume of mercury and mercury compounds set forth in the right-hand column of Appended Table 1 of the Supplementary Provisions for each type and size of unit set forth in the middle column of that table.

- (2) Notwithstanding the provisions of the preceding paragraph, for kilns used for the manufacture of cement set forth in row 7 of Appended Table 1 of the Supplementary Provisions that are installed as of the effective date of this Ministerial Order and that have mercury content per kilogram of limestone used as raw material of 0.05 milligrams or more per month, the volume of mercury and mercury compounds set forth in the right-hand column of that table is 140 micrograms until the mercury content per kilogram of limestone used as raw material is less than 0.05 milligrams per month for four consecutive months.

- (3) The provisions of Article 2, paragraph (1) of the Supplementary Provisions of the New Ordinance do not apply to a unit emitting mercury that has been

installed as of the effective date of this Ministerial Order and that does not comply with the standards under the provisions of that paragraph of that Article, until the last day in the two-year period that begins on the effective date of this Ministerial Order (if refurbishment to comply with the standards under the provisions of Article 2, paragraph (1) of the Supplementary Provisions of the New Ordinance for a unit emitting mercury or unit for processing mercury and mercury compounds is completed before the same day, the date of completion of that refurbishment).

- (4) Notwithstanding the provisions of the preceding paragraph, the provisions of Article 2, paragraph (1) of the Supplementary Provisions of the New Ordinance that concern a unit emitting mercury that has been installed as of the effective date of this Ministerial Order, that does not comply with the standards under the provisions of Article 2, paragraph (1) of the Supplementary Provisions of the New Ordinance, and that constitutes a unit set forth in the left-hand column of Appended Table 2 of the Supplementary Provisions, do not apply to such a unit until each of the dates set forth in the right-hand column of that table.
- (5) The provisions of the preceding paragraphs do not apply to a unit emitting mercury that has its heat conducting area, burner combustion capacity, raw material processing capacity, fire grate area, tuyere cross-section area, transformer rated capacity, or incineration capacity increased by 50 percent or more (limited those accompanied by an increase in the volume of mercury emitted from the unit emitting mercury) due to a change in the structure of the unit emitting mercury on or after the effective date of this Ministerial Order.
- (6) A document that is based on a form from before the amendment by this Ministerial Order and that exists on the effective date of this Ministerial Order may be used by repairing this until otherwise provided for by law.

Appended Table 1 of the Supplementary Provisions

(i)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal (excluding those that exclusively burn coal) and have burner fuel combustion capacity of less than 100,000 liters per hour converted into heavy oil	15 micrograms
(ii)	Boilers listed in row 1 of Appended Table 1 of the Cabinet Order that burn coal other than those listed in the preceding row	10 micrograms

(ii i)	Units listed in row 3 through row 5 of Appended Table 1 of the Cabinet Order and units listed in row 14 that are units used for primary refining and used for refining copper or gold (excluding melting furnaces only using crude copper, crude silver or crude gold as raw material.)	30 micrograms
(iv )	Units listed in row 3 through row 5 of Appended Table 1 of the Cabinet Order and units listed in row 14 that are units used for primary refining and used for refining lead or zinc (excluding melting furnaces only using crude lead or distilled zinc as raw material)	50 micrograms
(v)	Units listed in row 3 through row 5 of Appended Table 1 of the Cabinet Order and units listed in row 14 that are units used for secondary refining and used for refining copper, lead or zinc, melting furnaces, melting furnaces listed in row 24 used for secondary refining of lead (not including the manufacture of lead alloys) and units listed in row 3 of Appended Table 1 of the Order for Enforcement of the Act of Special Measures Concerning Dioxins (Cabinet Order No. 433 of 1999) (excluding melting furnaces only using crude copper, crude silver or crude gold as raw material)	400 micrograms
(vi )	Units listed in row 3 through row 5 of Appended Table 1 of the Cabinet Order that are units used for secondary refining and used for refining gold (excluding melting furnaces only using crude silver or crude gold as raw material)	50 micrograms
(vi i)	Kilns listed in row 9 of Appended Table 1 of the Cabinet Order that are used for the manufacture of cement	80 micrograms

(vi ii)	Waste incinerators listed in row 13 of Appended Table 1 of the Cabinet Order, waste processing units prescribed in Article 8, paragraph (1) of the Waste Management and Public Cleansing Act (Act No. 137 of 1970) (limited to incineration units) and units listed in Article 7, item (iii), item (v), item (viii), item (x), item (xi-2), item (xii) and item (xiii-2) of the Order for Enforcement of the Waste Management and Public Cleansing Act (Cabinet Order No. 300 of 1971; hereinafter referred to as "Order Enforcement of the Waste Management Act") that have a fire grate area of 2 square meters or more or have a incineration capacity of 200 kilograms or more per hour (excluding cases of disposal of only industrial waste by waste oil incineration units listed in Article 7, item (v) of the Order Enforcement of the Waste Management Act that are those handling waste oil other than that produced in refining processes using crude oil as a raw material and those listed in the following row)	50 micrograms
(ix )	Units used for the collection of mercury from industrial waste from which mercury is to be collected pursuant to the provisions of Article 6, paragraph (1), item (ii),(e) or Article 6-5, item (ii),(h) of the same Cabinet Order or mercury-containing recyclable resources prescribed in Article 2, paragraph (2) of the Act on Preventing Environmental Pollution of Mercury (Act No. 42 of 2015) (limited to units including a heating process during collection)	100 micrograms

Remarks

(1) "Units used for primary refining" mean units listed in row 3 through row 5 of Appended Table 1 of the Cabinet Order and units listed in row 14 that refine copper, lead or zinc using raw materials with mineral sulfide content of 50 percent or more by weight or materials made up of those raw materials, and refine gold using raw materials with mineral sulfide content of 50 percent or more by weight or materials made up of those raw materials.

(2) "Units used for secondary refining" are units listed in row 3 through row 5 of Appended Table 1 of the Cabinet Order and units listed in row 14 other than units used for primary refining.

(3) The volume of mercury or a mercury compound listed in the right column of this table is the volume of mercury or a mercury compound calculated using the formula shown in item (i) for units using electricity as a heat source and units listed in row 3 through row 6, and using the formula shown in item (ii) for other units.

In this equation, C, On, Os and Cs are to represent the following values respectively:

C: Volume of mercury or a mercury compound (units: micrograms)

(i)  $C = C_s$

(ii)  $C = (21 - O_n) / (21 - O_s) \cdot C_s$

On: The values listed in the right column of the following table for units in each of the rows listed in the left column of the same table.

Row 1, row 2	6
Row 7	10
Row 8, row 9	12

Os: Concentration of oxygen in the emission gasses (20 percent in cases where the concentration exceeds 20 percent) (units: percent)

Cs: The concentration of mercury measured using the method specified by the Minister of the Environment, calculated as the concentration per cubic meter of emission gasses, calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere (units: micrograms)

(4) In the case of units where the volume of mercury or a mercury compound fluctuates significantly, the average volume of a single process is used.

Appended Table 2 of the Supplementary Provisions

<p>A person who makes an application for approval of a change of a unit (limited to changes pertaining to units emitting mercury and units processing mercury or mercury compound) pursuant to the provisions of Article 9, paragraph (1) or Article 15-2-6, paragraph (1) of the Waste Management and Public Cleansing Act (Act No. 137 of 1970; hereinafter referred to as the "Waste Management Act") during the period until the date one year has elapsed since the date of enforcement of this Ministerial Order</p>	<p>The earlier date of the date of commencement of use of a unit for which a change is approved pursuant to the provisions of Article 9, paragraph (1) or Article 15-2-6, paragraph (1) of the Waste Management Act or the date one year has elapsed since the date approval was received</p>
<p>A person who provides notification of a change (limited to changes pertaining to units emitting mercury and units processing mercury or mercury compound) pursuant to the provisions of Article 9-3, paragraph (8) of the Waste Management Act during the period until the date one year has elapsed since the date of enforcement of this Ministerial Order</p>	<p>The earlier date of the date of commencement of use of the unit for which notification was provided pursuant to the provisions of Article 9-3, paragraph (8) of the Waste Management Act, the date on which the period in paragraph (3) of the same article applied mutatis mutandis pursuant to paragraph (9) of the same article has elapsed, or the date one year has elapsed since the date notice stating that the content of the notification is reasonable is received from the prefectural governor</p>

**Supplementary Provisions [Order of the Ministry of the Environment No. 1 of January 6, 2017]**

This Ministerial Order comes into effect as from the day of promulgation; provided, however, that the provisions of Article 2 come into effect as from the effective date of the Act Partially Amending the Air Pollution Control Act (Act No. 41 of 2015).

**Supplementary Provisions [Order of the Ministry of the Environment No. 9 of March 30, 2020]**

This Ministerial Order comes into effect as from the day of promulgation.

**Supplementary Provisions [Order of the Ministry of the Environment No. 25 of October 15, 2020]**

(Effective Date)

Article 1 This Ministerial Order comes into effect as of the date on which the Act Partially Amending the Air Pollution Control Act (referred to below in this Article as the "Amending Act") comes into effect (April 1, 2021); provided, however, that the provisions set forth in the items below come into effect on the dates specified in those items.

(i) provisions of Article 2 and Article 6 April 1, 2022

(ii) provisions of Article 3 and Article 7 October 1, 2023

(Transitional Measures)

Article 2 (1) The provisions of Article 10-4, Article 16-4 to Article 16-16, and Appended Table 7 of the Regulation for Enforcement of the Air Pollution Control Act after their amendment by the provisions of Article 1 apply to construction work involving demolition, remodeling, or renovation commencing subsequent to a date calculated after 14 days have elapsed since the date (referred to as the "effective date" in the following paragraph) this Ministerial Order enters into effect ((excluding construction work involving demolition, remodeling, or renovation related to work emitting or dispersing specified particulates which had not yet commenced by that date notified under the provisions of Article 18-15, paragraphs (1) and (2) of the Air Pollution Control Act before their amendment by the Amending Act (hereinafter referred to as "notified work not yet commenced")). Prior laws continue to govern construction work involving demolition, remodeling, or renovation commenced before that day (including notified work not yet commenced; the same applies in the following paragraph).

(2) Notifications of implementation of work emitting or dispersing specified particulates associated with construction work involving demolition, remodeling, and renovation which pursuant to the provisions of the preceding paragraph continue to be governed by prior laws can, regardless of the provisions of Article 10-4, paragraph (1) of the Regulation for Enforcement of the Air Pollution Control Act after amendment by the provisions of Article 1, be made using a written notification based on Form 3-4 before amendment under the provisions of Article 1.

**Supplementary Provisions [Order of the Ministry of the Environment No. 31 of December 28, 2020]**

(Effective Date)

(1) This Ministerial Order comes into effect as from the day of promulgation.



(Transitional Measures)

- (2) Documents using a format (referred to as the "past format" in the following paragraph) from before the amendment by this Order and that exists at the time this Order enters into effect are deemed to be based on the format from after the amendment by this Ministerial Order.
- (3) Until otherwise provided for by law, documents using the past format that exist at the time this Order enters into effect may be used by repairing them to the extent that is deemed to be reasonably necessary.

**Supplementary Provisions [Order of the Ministry of the Environment No. 3 of March 25, 2021]**

(Effective Date)

- (1) This Ministerial Order comes into effect as of April 1, 2021.

(Transitional Measures)

- (2) Documents using a format (referred to as the "past format" in the following paragraph) from before the amendment by this Order and that exists at the time this Order enters into effect are deemed to be based on the format from after the amendment by this Ministerial Order.
- (3) Until otherwise provided for by law, documents using the past format that exist at the time this Order enters into effect may be used by repairing them to the extent that is deemed to be reasonably necessary.

**Supplementary Provisions [Order of the Ministry of the Environment No. 4 of March 3, 2022]**

(Effective Date)

Article 1 This Ministerial Order comes into effect as from the day of promulgation. However, the provisions of Article 1 come into effect as of the date on which the Cabinet Order Partially Amending the Order for Enforcement of the Air Pollution Control Act comes into effect (October 1, 2022).

(Transitional Measures)

Article 2 (1) Documents using a format (referred to as the "past format" in the following paragraph) based on Form 3-6 of the Regulation for Enforcement of the Air Pollution Control Act from before the amendment by Article 1 and that exist at the time the provisions of Article 1 enter into effect are deemed to be based on the format of Form 3-6 after the amendment of the Regulation for Enforcement of the Air Pollution Control Act by that Article.

(2) Forms which have been prepared based on past formats existing at the time the provisions of Article 1 enter into effect may continue to be used for the time being by making amendments thereto.

**Supplementary Provisions [Order of the Ministry of the Environment No. 10 of June 23, 2023]**

This Ministerial Order comes into effect as from the day of promulgation. However, the provisions of Article 1 come into effect as of January 1, 2026.

Appended Table 1 (Related to Article 3)

1	Areas listed in items 33, 35, 49, 54, 58 and 60 of Appended Table 3 of the Order	3
2	Areas listed in items 27, 29, 47, 48, 53, 56, 59, 61, 64, 66, 67, 69, 74, 75, 77, 78, 80, 85, 88, 90 and 96 of Appended Table 3 of the Order	3.5
3	Areas listed in item 1 of Appended Table 3 of the Order	4
4	Areas listed in items 5, 18, 22 and 79 of Appended Table 3 of the Order	4.5
5	Areas listed in items 38, 71 and 87 of Appended Table 3 of the Order	5
6	Areas listed in items 8, 17, 24, 36, 65, 76, 83, 86 and 94 of Appended Table 3 of the Order	6
7	Areas listed in items 7, 34 and 68 of Appended Table 3 of the Order	6.42
8	Areas listed in items 11, 23-2, 23-3, 40, 46 and 70 of Appended Table 3 of the Order	7
9	Areas listed in items 3, 4, 15, 23, 41, 72, 73 and 81 of Appended Table 3 of the Order	8
10	Areas listed in items 14, 39, 50, 55, 62, 89, 91 and 97 of Appended Table 3 of the Order	8.76
11	Areas listed in items 25, 26, 31, 51, 52 and 99-2 of Appended Table 3 of the Order	9
12	Areas listed in items 6, 42, 45 and 92 of Appended Table 3 of the Order	10

13	Areas listed in items 2, 12, 13, 16, 21, 35-2, 37, 43, 44, 57, 82, 84, 93, 95 and 99 of Appended Table 3 of the Order	11.5
14	Areas listed in items 25-2, 46-2, 67-2, 81-2, 90-2 and 99-3 of Appended Table 3 the Order	13
15	Areas listed in items 7-2, 8-2, 9, 10, 14-2, 19, 20, 28, 30, 32, 36-2, 42-2, 42-3, 54-2, 55-2, 63, 84-2, 92-2, 97-2 and 98 of Appended Table 3 of the Order	14.5
16	Areas listed in item 100 of Appended Table 3 of the Order	17.5

Remarks: The amount of sulfur oxides in Article 3, paragraph (1) calculated based on the value listed in the right column of this table represents the amount of sulfur oxides measured and calculated by any of the following measurement methods:

1. a method for measuring the concentration of sulfur oxides by the method prescribed in JIS K0103, and the amount of emission gas by the method prescribed in JIS Z8808, respectively; or
2. a method for measuring the sulfur content rate of fuel by the method prescribed in JIS K2301, JIS K2541-1 through 2541-7, or JIS M8813, and the used amount of fuel by the method prescribed in JIS Z8762-1 through Z8762-4, respectively
3. a method specified by the Minister of the Environment.

Appended Table 2 (Related to Articles 4 and 7)

1	Boilers listed in row 1 of Appended Table 1 of the Order that combust only gas (excluding those listed in row 5)	The amount of emission gasses (meaning the maximum amount converted into the amount of emission gasses per hour with a temperature of zero degrees and a pressure of one atmosphere; hereinafter the same applies in this table and Appended Table 3-2) is 40,000 cubic meters or more	0.05 grams	0.03 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.10 grams	0.05 grams

2	Boilers listed in row 1 of Appended Table 1 of the Order that combust only heavy oil or other liquid fuel (excluding black liquor generated in connection with the manufacturing of pulp and paper; hereinafter the same applies in this table) or that combust gas and liquid fuel in mixture (excluding those listed in row 5).	The amount of emission gas is 200,000 cubic meters or more	0.05 grams	0.04 grams
		The amount of emission gasses is 40,000 cubic meters or more and less than 200,000 cubic meters	0.15 grams	0.05 grams
		The amount of emission gasses is 10,000 cubic meters or more and less than 40,000 cubic meters	0.25 grams	0.15 grams
		The amount of emission gasses is less than 10,000 cubic meters	0.30 grams	0.15 grams
3	Boilers listed in row 1 of Appended Table 1 of the Order that combust only black liquor generated in connection with the manufacturing of pulp and paper or that combust black liquor generated in connection with the manufacturing of pulp and paper and gas or liquid fuel in mixture (excluding those listed in row 5).	The amount of emission gasses is 200,000 cubic meters or more	0.15 grams	0.10 grams
		The amount of emission gasses is 40,000 cubic meters or more and less than 200,000 cubic meters	0.25 grams	0.15 grams

		The amount of emission gasses is less than 40,000 cubic meters	0.30 grams	0.15 grams
4	Boilers listed in row 1 of Appended Table 1 of the Order that combust coals (excluding those listed in the following row)	The amount of emission gas is 200,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gas is 40,000 cubic meters or more and less than 200,000 cubic meters	0.20 grams	0.10 grams
		The amount of emission gas is less than 40,000 cubic meters	0.30 grams	0.15 grams
5	Boilers listed in row 1 of Appended Table 1 of the Order that are attached to a catalyst regeneration tower listed in the middle column of row 8 of the same table		0.20 grams	0.15 grams
6	Boilers listed in item (i) of Appended Table 1 of the Order other than those listed in the preceding items	The amount of emission gas is 40,000 cubic meters or more	0.30 grams	0.15 grams
		The amount of emission gas is less than 40,000 cubic meters	0.30 grams	0.20 grams
7	Gasification furnaces listed in row 2 of Appended Table 1 of the Order		0.05 grams	0.03 grams
8	Heating furnaces listed in row 2 of Appended Table 1 of the Order		0.10 grams	0.03 grams
9	Roasting furnaces listed in row 3 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams

		The amount of emission gasses is less than 40,000 cubic meters	0.15 grams	0.10 grams
10	Sintering furnaces listed in row 3 of Appended Table 1 of the Order that are to be used for manufacturing ferro-manganese		0.20 grams	0.10 grams
11	Sintering furnaces listed in row 3 of Appended Table 1 of the Order other than those listed in the preceding row		0.15 grams	0.10 grams
12	Calcining furnaces listed in row 3 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.20 grams	0.10 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.25 grams	0.15 grams
13	Smelting furnaces listed in row 4 of Appended Table 1 of the Order that are blast furnaces		0.05 grams	0.03 grams
14	Smelting furnaces listed in row 4 of Appended Table 1 of the Order other than those listed in the preceding item		0.15 grams	0.08 grams
15	Converters listed in row 4 of Appended Table 1 of the Order		0.10 grams	0.08 grams
16	Open hearth furnaces listed in row 4 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.20 grams	0.10 grams

1 7	Melting furnaces listed in row 5 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.20 grams	0.10 grams
1 8	Heating furnaces listed in row 6 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.08 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.20 grams	0.10 grams
1 9	Heating furnaces listed in row 7 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.15 grams	0.08 grams
2 0	Catalyst regeneration towers listed in row 8 of Appended Table 1 of the Order		0.20 grams	0.15 grams
2 1	Combustion furnaces listed in row 8-2 of Appended Table 1 of the Order		0.10 grams	0.05 grams
2 2	Baking furnaces listed in row 9 of Appended Table 1 of the Order (limited to lime baking furnaces; the same applies in the following row) that are underground furnaces		0.40 grams	0.20 grams
2 3	Baking furnaces listed in row 9 of Appended Table 1 of the Order other than those listed in the preceding row		0.30 grams	0.15 grams
2 4	Baking furnaces listed in row 9 of Appended Table 1 of the Order that are to be used for manufacturing cement		0.10 grams	0.05 grams

2 5	Baking furnaces listed in row 9 of Appended Table 1 of the Order that are to be used for manufacturing refractory brick or refractory raw material	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.20 grams	0.10 grams
2 6	Baking furnaces listed in row 9 of Appended Table 1 of the Order other than those listed in rows 22 through 25	The amount of emission gasses is 40,000 cubic meters or more	0.15 grams	0.08 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.25 grams	0.15 grams
2 7	Melting furnaces listed in row 9 of Appended Table 1 of the Order that are to be used for manufacturing plate glass or glass fiber product (including glass fiber)	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.15 grams	0.08 grams
2 8	Melting furnaces listed in row 9 of Appended Table 1 of the Order that are to be used for manufacturing optical glass, electrical glass or frit	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.15 grams	0.08 grams
2 9	Melting furnaces listed in row 9 of Appended Table 1 of the Order other than those listed in the preceding two rows	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams



		The amount of emission gasses is less than 40,000 cubic meters	0.20 grams	0.10 grams
30	Reacting furnaces and direct heating furnaces listed in row 10 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.15 grams	0.08 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.20 grams	0.10 grams
31	Drying furnaces listed in row 11 of Appended Table 1 of the Order that are aggregate drying furnaces		0.50 grams	0.20 grams
32	Drying furnaces listed in row 11 of Appended Table 1 of the Order other than those listed in the preceding row	The amount of emission gasses is 40,000 cubic meters or more	0.15 grams	0.08 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.20 grams	0.10 grams
33	Electric furnaces listed in row 12 of Appended Table 1 of the Order that are to be used for manufacturing alloy iron (limited to that whose silicon content is 40 percent or more)		0.20 grams	0.10 grams
34	Electric furnaces listed in row 12 of Appended Table 1 of the Order that are to be used and for manufacturing alloy iron (excluding those listed in the preceding row) and for manufacturing carbide		0.15 grams	0.08 grams
35	Electric furnaces listed in row 12 of Appended Table 1 of the Order other than those listed in the preceding two rows		0.10 grams	0.05 grams

3 6	Waste incinerators listed in row 13 of Appended Table 1 of the Order	Incineration capacity is not less than 4,000 kilograms per hour	0.04 grams	0.04 grams
		Incineration capacity is 2,000 kilograms or more and less than 4,000 kilograms per hour	0.08 grams	0.08 grams
		Incineration capacity is less than 2,000 kilograms per hour	0.15 grams	0.15 grams
37				
3 8	Roasting furnaces listed in row 14 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.15 grams	0.08 grams
3 9	Sintering furnaces listed in row 14 of Appended Table 1 of the Order		0.15 grams	0.10 grams
4 0	溶鋳炉 Blast furnaces listed in row 14 of Appended Table 1 of the Order		0.15 grams	0.08 grams
4 1	Converters listed in row 14 of Appended Table 1 of the Order		0.15 grams	0.08 grams
4 2	Melting furnaces listed in row 14 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.20 grams	0.10 grams
4 3	Drying furnaces listed in row 14 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.15 grams	0.08 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.20 grams	0.10 grams

4 4	Reacting furnaces listed in row 18 of Appended Table 1 of the Order		0.30 grams	0.15 grams
4 5	Electrolytic furnaces listed in row 20 of Appended Table 1 of the Order		0.05 grams	0.03 grams
4 6	Baking furnaces listed in row 21 of Appended Table 1 of the Order		0.15 grams	0.08 grams
4 7	Melting furnaces listed in row 21 of Appended Table 1 of the Order		0.20 grams	0.10 grams
4 8	Drying furnaces listed in row 23 of Appended Table 1 of the Order		0.10 grams	0.05 grams
4 9	Baking furnaces listed in row 23 of Appended Table 1 of the Order		0.15 grams	0.08 grams
5 0	Melting furnaces listed in row 24 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.20 grams	0.10 grams
5 1	Melting furnaces listed in row 25 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.15 grams	0.08 grams
5 2	Melting furnaces listed in row 26 of Appended Table 1 of the Order	The amount of emission gasses is 40,000 cubic meters or more	0.10 grams	0.05 grams
		The amount of emission gasses is less than 40,000 cubic meters	0.15 grams	0.08 grams
5 3	Reverberating furnaces listed in row 26 of Appended Table 1 of the Order		0.10 grams	0.05 grams

5 4	Reacting furnaces listed in row 26 of Appended Table 1 of the Order (excluding those to be used for manufacturing lead nitrate)		0.05 grams	0.03 grams
5 5	Coke ovens listed in row 28 of Appended Table 1 of the Order		0.15 grams	0.10 grams
5 6	Gas turbines listed in row 29 of Appended Table 1 of the Order		0.05 grams	0.04 grams
5 7	Diesel engines listed in row 30 of Appended Table 1 of the Order		0.10 grams	0.08 grams
5 8	Gas engines listed in row 31 of Appended Table 1 of the Order		0.05 grams	0.04 grams
5 9	Gasoline engines listed in row 32 of Appended Table 1 of the Order		0.05 grams	0.04 grams

Remarks

1. The amount of soot and dust listed in the fourth column and the fifth column of this table means the amount of soot and dust calculated using the following formula (provided that, for units that use electricity as heat source, boilers listed in row 3, roasting furnaces listed in rows 9 and 38, sintering furnaces listed in rows 10, 11 and 39, calcining furnaces listed in row 12, shaft furnaces listed in row 13, blast furnaces listed in rows 14 and 40, converters listed in rows 15 and 41, open-hearth furnaces listed in rows 16, melting furnaces listed in rows 17, 42, 47, 50, 51 and 52, aggregate drying furnaces listed in row 31, drying furnaces listed in rows 32, 43 and 48 that are direct hot air drying furnaces, reverberating furnaces listed in row 53, and reacting furnaces listed in row 54 to be used for manufacturing lead oxide, C=Cs).

$$C = ((21 \cdot O_n) / (21 \cdot O_s)) \cdot C_s$$

(In this formula, C, O<sub>n</sub>, O<sub>s</sub> and C<sub>s</sub> represent the following values respectively:

C: Amount of soot and dust (unit: gram)

O<sub>n</sub>: Value listed in the right column of the following table according to the facilities listed in respective rows in the left column of the same table.

row 58, 59	0
row 2, 5	4
row 1	5
row 4, 6, 19, 20, 30, 44, 54	6
row 7, 8, 55	7
row 21	8
row 24	10
row 18	11
row 36	12

五七の項row 57	13
row 22, 23, 26, 27, 29, 46, 49	15
row 28, 31, 32, 43, 48, 56	16
row 25	18

Os: Concentration of oxygen in emission gases (in cases where the concentration exceeds 20 percent, 20 percent) (unit: percent)

Cs: Amount of soot and dust measured by the method prescribed in JIS Z8808 (unit: gram)

(2) The amount of soot and dust listed in the fourth column and the fifth column of this table does not include the amount of soot and dust discharged to be when igniting the fuel, arranging the fire layer to remove ashes and cleaning up the soot (limited to those to be discharged within a period not exceeding six minutes in total per hour).

(3) With regard to units the amount of soot and dust discharged from which varies remarkably, the average amount per process is applicable.

Appended Table 3 (Related to Article 5)

1	Cadmium and compound thereof	Units listed in row 9 of Appended Table 1 of the Order to be used for manufacturing glass or glass products (limited to those using cadmium sulfide or cadmium carbonate as raw material), and units listed in rows 14 and 15	1.0 milligram
2	Chlorine	Units listed in rows 16 through 19 of Appended Table 1 of the Order	30 milligrams
3	Hydrogen chloride	Waste incinerators listed in row 13 of Appended Table 1 of the Order	700 milligrams
		Units listed in rows 16 through 19 of Appended Table 1 of the Order	80 milligrams

4	Fluorine, hydrogen fluoride and silicon fluoride	Units listed in row 9 of Appended Table 1 of the Order to be used for manufacturing glass or glass products (limited to those using fluorite or sodium fluorosilicate as raw material), reacting units listed in row 21 (excluding those to be used for manufacturing superphosphate of lime or double superphosphate of lime), concentration units and melting furnaces (excluding those to be used for manufacturing phosphate fertilizer), and units listed in rows 22 and 23.	10 milligrams
		Electrolytic furnaces listed in row 20 of Appended Table 1 of the Order	1.0 (3.0) milligrams
		Reacting units listed in row 21 of Appended Table 1 of the Order (limited to those to be used for manufacturing superphosphate of lime or double superphosphate of lime), and melting furnaces that are electric furnaces (limited to those to be used for manufacturing phosphate fertilizer)	15 milligrams
		Baking furnaces and melting furnaces listed in row 21 of Appended Table 1 of the Order that are open-hearth furnaces (limited to those to be used for manufacturing phosphate fertilizer)	20 milligrams

5	Lead and compounds thereof	Units listed in row 9 of Appended Table 1 of the Order to be used for manufacturing glass or glass products (limited to those using lead oxide as raw material)	20 milligrams
		Roasting furnaces, converters, melting furnaces and drying furnaces listed in row 14 of Appended Table 1, and units listed in rows 24 and 26	10 milligrams
		Sintering furnaces and blast furnaces listed in row 14 of Appended Table 1 of the Order	30 milligrams

Remarks

1. The amount of hazardous substances listed in the fourth column of this table (excluding those listed in the remarks 2) is represented as: the amount collected by the method prescribed in JIS Z8808 and measured as cadmium or lead by the method prescribed in JIS K0083 for those listed in rows 1 and 5, the amount measured by the method prescribed in JIS K0106 for those listed in row 2, the amount measured by the method prescribed in JIS K0107 for those listed in row 3, or the amount measured as fluorine by the method prescribed in JIS K0105 for those listed in row 4, respectively; and does not include the amount of hazardous substances necessarily discharged in the case of cleaning up of soot, etc (limited to those to be discharged within a period not exceeding six minutes in total per hour).

2. The amount of hydrogen chloride listed in the fourth column of row 3 of this table (limited to that pertaining to waste incinerators listed in row 13 of Appended Table 1 of the Order) represents the amount of hydrogen chloride calculated by the following formula:  $C = \left( 9 / (21 - O_s) \right) \cdot C_s$

(In this formula, C, O<sub>s</sub> and C<sub>s</sub> represent the following values respectively:

C: Amount of hydrogen chloride (unit: milligram)

O<sub>s</sub>: Concentration of oxygen in emission gases (unit: percent)

C<sub>s</sub>: Concentration of hydrogen chloride measured by the method specified in the JIS K0107, calculated as the concentration per cubic meter of emission gasses calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere (unit: milligram))

3. Figures in parentheses shown in the fourth column represent the amount of hazardous substances at the outlet in cases where the hazardous substances are directly absorbed from electrolytic furnaces and discharged from the outlet through ducts.

4. With regard to units the amount of hazardous substances discharged from which varies remarkably, the average amount per process is applicable.

Appended Table 3-2 (Related to Article 5)

1	Boilers listed in row 1 of Appended Table 1 of the Order that combust gas	The amount of emission gas is 500,000 cubic meters or more	60 cubic centimeters
		The amount of emission gas is 40,000 cubic meters or more and less than 500,000 cubic meters	100 cubic centimeters
		The amount of emission gas is 10,000 cubic meters or more and less than 40,000 cubic meters	130 cubic centimeters
		The amount of emission gas is less than 10,000 cubic meters	150 cubic centimeters
2	Boilers listed in row 1 of Appended Table 1 of the Order that combust solid fuel (excluding those listed in the following row)	The amount of emission gas is 700,000 cubic meters or more	200 cubic centimeters
		The amount of emission gas is 40,000 cubic meters or more and less than 700,000 cubic meters	250 cubic centimeters
		The amount of emission gas is less than 40,000 cubic meters	300 cubic centimeters
2 - 2	Boilers listed in row 1 of Appended Table 1 of the Order whose heat transmission area is less than 10 square meters and that combust solid fuel		350 cubic centimeters
2 - 3	Boilers listed in row 1 of Appended Table 1 of the Order whose heat transmission area is less than 10 square meters and that combust liquid fuel (excluding those listed in the preceding row)		260 cubic centimeters
3	Boilers listed in row 1 of Appended Table 1 of the Order other than those listed in the preceding rows	The amount of emission gas is 500,000 cubic meters or more	130 cubic centimeters
		The amount of emission gas is 10,000 cubic meters or more and less than 500,000 cubic meters	150 cubic centimeters



		The amount of emission gas is less than 10,000 cubic meters	180 cubic centimeters
4	Units listed in row 2 of Appended Table 1 of the Order		150 cubic centimeters
5	Roasting furnaces listed in row 3 of Appended Table 1 of the Order		220 cubic centimeters
6	Sintering furnaces listed in row 3 of Appended Table 1 of the Order		220 cubic centimeters
7	Calcining furnaces listed in row 3 of Appended Table 1 of the Order		200 cubic centimeters
8	Blast furnaces listed in row 4 of Appended Table 1 of the Order		100 cubic centimeters
9	Melting furnaces listed in row 5 of Appended Table 1 of the Order (excluding cupolas)		180 cubic centimeters
10	Heating furnaces listed in row 6 of Appended Table 1 of the Order that are of radiant tube-type (limited to those whose amount of emission gas is 10,000 cubic meters or more and less than 100,000 cubic meters)		150 cubic centimeters
11	Heating furnaces listed in row 6 of Appended Table 1 of the Order that are those for forged steel pipe (limited to those whose amount of emission gas is 10,000 cubic meters or more and less than 100,000 cubic meters)		180 cubic centimeters
12	Heating furnaces listed in row 6 of Appended Table 1 of the Order other than those listed in the preceding two rows	The amount of emission gas is 100,000 cubic meters or more	100 cubic centimeters
		The amount of emission gas is 10,000 cubic meters or more and less than 100,000 cubic meters	130 cubic centimeters

		The amount of emission gas is 5,000 cubic meters or more and less than 10,000 cubic meters	150 cubic centimeters
		The amount of emission gas is less than 5,000 cubic meters	180 cubic centimeters
1 3	Heating furnaces listed in row 7 of Appended Table 1 of the Order	The amount of emission gas is 40,000 cubic meters or more	100 cubic centimeters
		The amount of emission gas is 10,000 cubic meters or more and less than 40,000 cubic meters	130 cubic centimeters
		The amount of emission gas is 5,000 cubic meters or more and less than 10,000 cubic meters	150 cubic centimeters
		The amount of emission gas is less than 5,000 cubic meters	180 cubic centimeters
1 4	Catalyst regeneration towers listed in row 8 of Appended Table 1 of the Order		250 cubic centimeters
1 5	Combustion furnaces listed in row 8-2 of Appended Table 1 of the Order		250 cubic centimeters
1 6	Baking furnaces listed in row 9 of Appended Table 1 of the Order that are lime baking furnaces (limited to rotary kilns that combust gas)		250 cubic centimeters
1 7	Baking furnaces listed in row 9 of Appended Table 1 of the Order that are to be used for manufacturing cement	The amount of emission gas is 100,000 cubic meters or more	250 cubic centimeters
		The amount of emission gas is less than 100,000 cubic meters	350 cubic centimeters
1 8	Baking furnaces listed in row 9 of Appended Table 1 of the Order that are to be used for manufacturing refractory brick or refractory raw material		400 cubic centimeters

19	Melting furnaces listed in row 9 of Appended Table 1 of the Order that are to be used for manufacturing plate glass or glass fiber product (including glass fiber)		360 cubic centimeters
20	Melting furnaces listed in row 9 of Appended Table 1 of the Order that are to be used for manufacturing optical glass, electrical glass or frit		800 cubic centimeters
21	Melting furnaces listed in row 9 of Appended Table 1 of the Order (limited to those to be used for manufacturing glass) other than those listed in the preceding two rows		450 cubic centimeters
22	Facilities listed in row 9 of Appended Table 1 of the Order other than those listed in rows 16 through 21		180 cubic centimeters
23	Facilities listed in row 10 of Appended Table 1 of the Order		180 cubic centimeters
24	Drying furnaces listed in row 11 of Appended Table 1 of the Order		230 cubic centimeters
25	Waste incinerators listed in row 13 of Appended Table 1 of the Order that incinerates wastes by the cyclonic system (limited to continuous furnaces)		450 cubic centimeters

2 6	Waste incinerators listed in row 13 of Appended Table 1 of the Order that incinerates wastes discharged from the process where nitro compounds, amino compounds or cyano compounds, or derivatives thereof are produced or used, or the process where effluent is processed by using ammonia (limited to continuous furnaces whose amount of emission gas is less than 40,000 cubic meters)		700 cubic centimeters
2 7	Waste incinerators listed in row 13 of Appended Table 1 of the Order other than those listed in the preceding two rows (with regard to those other than continuous furnaces, limited to those whose amount of emission gas is more than 40,000 cubic meters)		250 cubic centimeters
2 8	Roasting furnaces listed in row 14 of Appended Table 1 of the Order		220 cubic centimeters
2 9	Sintering furnaces listed in row 14 of Appended Table 1 of the Order		220 cubic centimeters
3 0	Blast furnaces listed in row 14 of Appended Table 1 of the Order that are slag processing furnaces to be used for refining zinc (limited to those using coals or cokes as fuel and reducing agent)		450 cubic centimeters
3 1	Blast furnaces listed in row 14 of Appended Table 1 of the Order other than those listed in the preceding row		100 cubic centimeters

3 2	Melting furnaces listed in row 14 of Appended Table 1 of the Order that are refining furnaces to be used for refining copper (limited to those using ammonia as a reducing agent)		330 cubic centimeters
3 3	Melting furnaces listed in row 14 of Appended Table 1 of the Order other than those listed in the preceding row		180 cubic centimeters
3 4	Drying furnaces listed in row 14 of Appended Table 1 of the Order		180 cubic centimeters
3 5	Reacting furnaces listed in row 18 of Appended Table 1 of the Order		180 cubic centimeters
3 6	Baking furnaces listed in row 21 of Appended Table 1 of the Order		180 cubic centimeters
3 7	Melting furnaces listed in row 21 of Appended Table 1 of the Order		600 cubic centimeters
3 8	Drying furnaces listed in row 23 of Appended Table 1 of the Order		180 cubic centimeters
3 9	Baking furnaces listed in row 23 of Appended Table 1 of the Order		180 cubic centimeters
4 0	Melting furnaces listed in row 24 of Appended Table 1 of the Order		180 cubic centimeters
4 1	Melting furnaces listed in row 25 of Appended Table 1 of the Order		180 cubic centimeters
4 2	Melting furnaces listed in row 26 of Appended Table 1 of the Order		180 cubic centimeters
4 3	Reverberating furnaces listed in row 26 of Appended Table 1 of the Order		180 cubic centimeters
4 4	Reacting furnaces listed in row 26 of Appended Table 1 of the Order		180 cubic centimeters
4 5	Facilities listed in row 27 of Appended Table 1 of the Order		200 cubic centimeters

4 6	Coke ovens listed in row 28 of Appended Table 1 of the Order		170 cubic centimeters
4 7	Gas turbines listed in row 29 of Appended Table 1 of the Order		70 cubic centimeters
4 8	Diesel engines listed in row 30 of Appended Table 1 of the Order		950 cubic centimeters
4 9	Gas engines listed in row 31 of Appended Table 1 of the Order		600 cubic centimeters
5 0	Gasoline engines listed in row 32 of Appended Table 1 of the Order		600 cubic centimeters

Remarks

The amount of nitrogen oxides listed in the fourth column of this table is deemed to be the amount of nitrogen oxides calculated by: the formula listed in item (i) for the units listed in rows 19 through 21 that combust by using only oxygen; the formula listed in item (ii) for the melting furnaces listed in row 42 to be used for manufacturing lead oxide, reacting furnaces listed in row 44 to be used for manufacturing lead oxide or lead nitrate, and units listed in row 45; or the formula listed in item (iii) for other units; provided, however, that for units the amount of nitrogen oxide discharged from which varies remarkably, the average amount per process is applicable.

(i)  $C = ((21 - O_n) / (21 - O_s)) \cdot C_s \cdot (1/4)$

(ii)  $C = C_s$

(iii)  $C = ((21 - O_n) / (21 - O_s)) \cdot C_s$

(In this formula, C, O<sub>n</sub>, O<sub>s</sub> and C<sub>s</sub> represent the following values respectively:

C: Amount of nitrogen oxides (unit: cubic centimeter)

O<sub>n</sub>: Value listed in the right column of the following table according to the units listed in respective rows in the left column of the same table.

row 49, 50	0
row 2-3, 3	4
row 1	5
row 2, 2-2, 13, 14, 23, 35, 44	6
row 4, 46	7
row 15	8
row 7, 17	10
row 10, 11, 12	11
row 9, 25, 26, 27, 32, 33, 40, 41, 42	12
row 48	13
row 5, 28	14
row 6, 8, 16, 19, 21, 22, 29, 30, 31, 36, 37, 39, 43	15
row 20, 24, 34, 38, 47	16
row 18	18

Os: Concentration of oxygen in emission gasses (in cases where the concentration exceeds 20 percent, 20 percent) (unit: percent)

Cs: Concentration of nitrogen oxides measured by the method specified in the JIS K0104, calculated as the concentration per cubic meter of emission gasses calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere (unit: cubic centimeter))

Appended Table 3-3 (Related to Article 5-2 and Article 16-17)

(i)	Boilers listed in row 1 of Appended Table 1 of the Order that combust coal and whose burning capacity is less than 100,000 liter/hour on a heavy oil conversion basis (excluding those combusting only coal)	10 micrograms
(ii)	Boilers listed in row 1 of Appended Table 1 of the Order that combust coal other than those listed in the preceding rows	8 micrograms
(ii i)	Units listed in rows 3 through 5 of Appended Table 1 of the Order and units listed in row 14) of the same table that are units to be used for primary refining and that are to be used for refining copper or gold (excluding melting furnaces using only crude copper, crude silver or crude gold as raw material)	15 micrograms
(iv )	Units listed in rows 3 through 5 of Appended Table 1 of the Order and units listed in row 14 of the same table that are units to be used for primary refining and that are to be used for refining lead or zinc (excluding melting furnaces using only crude lead or distilled zinc as raw material)	30 micrograms

(v)	Units listed in rows 3 through 5 of Appended Table 1 of the Order and units listed in row 14 of the same table that are units to be used for secondary refining and that are to be used for refining copper, lead or zinc; melting furnaces listed in row 24 of the same table to be used for secondary refining of lead (excluding manufacturing of lead alloy); and units listed in row 3 of Appended Table 1 of the Order for Enforcement of the Act on Special Measures Concerning Dioxins (Cabinet Order No. 433 of 1999) (excluding melting furnaces using only crude copper, crude lead or distilled zinc as raw material)	100 micrograms
(vi)	Units listed in rows 3 through 5 of Appended Table 1 of the Order that are units to be used for secondary refining and that are to be used for refining gold (excluding melting furnaces using only crude silver or crude gold as raw material)	30 micrograms
(vi i)	Baking furnaces listed in row 9 of Appended Table 1 of the Order that are to be used for manufacturing cement	50 microgram



(vi ii)	Waste incinerators listed in row 13 of Appended Table 1 of the Cabinet Order, waste processing units prescribed in Article 8, paragraph (1) of the Waste Management and Public Cleansing Act (Act No. 137 of 1970) (limited to incineration units) or units listed in Article 7, item (iii), item (v), item (viii), item (x), item (xi-2), item (xii) or item (xiii-2) of the Order for Enforcement of the Waste Management and Public Cleansing Act (Cabinet Order No. 300 of 1971; hereinafter referred to as "Order Enforcement of the Waste Management Act") that have a fire grate area of 2 square meters or more or have a incineration capacity of 200 kilograms or more per hour (excluding cases of disposal of only industrial waste by waste oil incineration units listed in Article 7, item (v) of the Order Enforcement of the Waste Management Act that are those handling waste oil other than that produced in refining processes using crude oil as a raw material and those listed in the following row)	30 micrograms
(ix )	Units to be used for recovering mercury from the industrial waste from which mercury is to be recovered pursuant to the provisions of Article 6, paragraph (1), item (ii), (e)(2) or Article 6-5, item (ii), (h) of Order for Enforcement of the Waste Disposal Act or from the mercury-containing recyclable resources specified in Article 2, paragraph (2) of the Act on Prevention of Pollution by Mercury of Environment (Act No.42 of 2015) (limited to units that include heating process at the time of recovery)	50 micrograms

Remarks

1. " Units to be used for primary refining" means units listed in rows 3 through 5 of Appended Table 1 of the Order and facilities listed in row 14 of the same table that refine copper, lead or zinc by using raw materials whose ratio by weight of mineral sulfide is 50 percent or more or materials consisting of that raw materials or that refine gold by using raw materials whose ratio by weight of concentrate is 50 percent or more or materials consisting of that raw materials.

2. " Units to be used for secondary refining" means units other than those listed in rows 3 through 5 of Appended Table 1 of the Order and units listed in row 14 of the same table that are to be used for primary refining.

3. The amount of mercury or mercury compound listed in the right column of this table is deemed to be the amount of mercury or mercury compound calculated by: the formula listed in item (i) for the units that use electricity as heat source and the units listed in rows 3 through 6; or the formula listed in item (ii) for the units.

(i)  $C=C_s$

(ii)  $C=(21-O_n)/(21-O_s) \cdot C_s$

In this formula, C,  $O_n$ ,  $O_s$  and  $C_s$  represent the following values respectively:

C: Amount of mercury or mercury compound (unit: microgram)

$O_n$ : Value listed in the right column of the following table according to the units listed in respective rows in the left column of the same table.

row 1, 2	6
row 7	10
row 8, 9	12

$O_s$ : Concentration of oxygen in emission gasses (in cases where the concentration exceeds 20 percent, 20 percent) (unit: percent)

$C_s$ : Concentration of mercury measured by the method prescribed by the Minister of the Environment calculated as if measured under conditions with a temperature of zero degrees and a pressure of one atmosphere (unit: microgram)

4. With regard to units the amount of mercury or mercury compound recovered by which varies remarkably, the average amount per process is applicable.

Appended Table 4 (Related to Article 7)

(i) Areas listed in item 22 of Appended Table 3 of the Order
ii) Areas listed in item 27 of Appended Table 3 of the Order
(iii) Areas listed in item 29 of Appended Table 3 of the Order
(iv) Areas listed in item 33 of Appended Table 3 of the Order
(v) Areas listed in item 35 of Appended Table 3 of the Order
(vi) Areas listed in item 38 of Appended Table 3 of the Order

(vii) Areas of Shimizu-shi (excluding Ohira, Kochi, Nishizato, Tozurasawa, Do, Nunozawa, Takayama, Shigenoshima, Wadashima, Kiyoji, Nakagochi, Shishihara, Kogochi, Yoshiwara, Isabu, Sugiyama, Mobata and Hirose) within areas listed in item 47 of Appended Table 3 of the Order
(viii) Areas of Fuji-shi (excluding Imamiya, Ishii, Makado, Unaigafuchi, Kazaki; Sekisobina, Iimori, Fuchikiri, Shugaku, Tsurushibashimo, Yokomichishimo, Marukato and areas without address within Obuchi; and Nakashibaone, Togariishi, Gonoone, Komakizoe, Nakaone, Sokoya, Gozaishi, Shogatsuzaka, Makinashi, Toishi, Naruya, Okadoba, Ippaimizu, Komugiishi, Kanayama, Norikoshiyama, Sawayama, Osawa, Kayaone, Ondashione, Hatogashira, Hatoone, Yokowatari, Shoninyama, Ohira, Ishione, Yokote, Asemidaira, Komochiishi, Wataboshi, Inohira, Ichinosawa, Azumano, Ohora, Terao, Nakao and Sannosawa within Enoo) within areas listed in item 48 of Appended Table 3 of the Order
(ix) Areas listed in item 49 of Appended Table 3 of the Order
(x) Areas listed in item 53 of Appended Table 3 of the Order
(xi) Areas of Yokkaichi-shi (excluding Kibayashicho, Takahanadaira 1-chome to 5-chome, Unemecho, Ogosohigashi 3-chome 7-ban, Kaigecho, Kitakomatsucho, Minamikomatsucho, Yamadacho, Nishiyamacho, Oyamacho, Uchiyamacho, Rokumyochi, Dogayamacho, Misatocho, Shikamacho, Wandacho, Kawashimacho, Komocho, Sugaharacho, Teragatacho, Takatsunocho, Soicho, Sakuracho, Chishakucho, Nishisakabecho, Yamanoishikicho, Akozucho, Kamiebicho, Shimoebicho, Hiraecho, Emuracho, Kitanocho, Kurodacho, Kayocho, Nakamuracho, Heizucho, Chiyodacho, Isakacho, Yamamuracho, Hironagacho, Asakecho, Yamajocho, Satsubacho, Kitayamacho, Nishioganecho, Oganecho, Asakegaoka 1-chome to 3-chome, Yachiyodai 1-chome and 2-chome, Suizawacho, Suizawanodacho, Nakanochi, Komakicho, Ichibacho and Nishimuracho), Mie-gun Kusucho, Mie-gun Asahicho, and Mie-gun Kawagoecho, within areas listed in item 54 of Appended Table 3 of the Order
(xii) Areas listed in item 56 of Appended Table 3 of the Order
(xiii) Areas listed in item 58 of Appended Table 3 of the Order
(xiv) Areas listed in item 59 of Appended Table 3 of the Order
(xv) Areas of Kobe-shi (excluding Kita-ku and Tarumi-ku), Amagasaki-shi, Nishinomiya-shi, Ashiya-shi, Itami-shi, Takarazuka-shi (excluding Kamisasori, Kobakoshinden, Shimosasori, Nagatani, Shibatsujishinden, Oharano, Hazu, Sakaino and Tamase), and Kawanishi-shi (excluding Mino, Higashiuneno, Nishiuneno, Yamahara, Yamashita, Sasabe, Gezai, Hitokura, Kunisaki, kurokawa and Yokoji) within areas listed in item 60 of Appended Table 3 of the Order
(xvi) Areas listed in item 61 of Appended Table 3 of the Order
(xvii) Areas listed in item 64 of Appended Table 3 of the Order
(xviii) Areas listed in item 66 of Appended Table 3 of the Order
(xix) Areas listed in item 74 of Appended Table 3 of the Order
(xx) Areas listed in item 75 of Appended Table 3 of the Order
(xxi) Areas listed in item 77 of Appended Table 3 of the Order
(xxii) Areas listed in item 78 of Appended Table 3 of the Order
(xxiii) Areas listed in item 80 of Appended Table 3 of the Order
(xxiv) Areas listed in item 83 of Appended Table 3 of the Order
(xxv) Areas listed in item 85 of Appended Table 3 of the Order

(xxvi) Areas listed in item 88 of Appended Table 3 of the Order
(xxvii) Areas listed in item 90 of Appended Table 3 of the Order
(xxviii) Areas listed in item 96 of Appended Table 3 of the Order
Remarks: The areas listed in this table are based on administrative districts and other districts as of February 1, 1974.

Appended Table 5 (Related to Article 7)

(i) Areas of special wards within areas listed in item 4 of Appended Table 4 of the Order
(ii) Areas listed in item 5 of Appended Table 4 of the Order
(iii) Areas listed in item 9 of Appended Table 4 of the Order
(iv) Areas listed in item 11 of Appended Table 4 of the Order
(v) Areas listed in item 13 of Appended Table 4 of the Order
(vi) Areas of Amagasaki-shi within areas listed in item 15 of Appended Table 4 of the Order
(vii) Areas listed in item 18 of Appended Table 4 of the Order
(viii) Areas of Kitakyushu-shi within areas listed in item 26 of Appended Table 4 of the Order
(ix) Areas listed in item 27 of Appended Table 4 of the Order
Remarks: The areas listed in this table are based on administrative districts as of February 1, 1974.

Appended Table 5-2 (Related to Article 15-2)

(i)	Drying units listed in row 1 of Appended Table 1-2 of the Order	600 cubic centimeters
(ii)	Painting units listed in row 2 of Appended Table 1-2 of the Order to be used for manufacturing motor vehicles (meaning motor vehicles as defined in Article 2, paragraph (2) of the Road Trucking Vehicle Act (Act No. 185 of 1951))	400 cubic centimeters
(ii i)	Painting units listed in row 2 of Appended Table 1-2 of the Order other than those listed in the preceding row	700 cubic centimeters
(iv)	Drying units listed in row 3 of Appended Table 1-2 of the Order to be used for manufacturing lumber or wooden products (including wooden furniture)	1,000 cubic centimeters
(v)	Drying units listed in row 3 of Appended Table 1-2 of the Order other than those listed in the preceding row	600 cubic centimeters
(vi)	Drying units listed in row 4 of Appended Table 1-2 of the Order	1,400 cubic centimeters

(vi i)	Drying units listed in row 5 of Appended Table 1-2 of the Order	1,400 cubic centimeters
(vi ii)	Drying units listed in row 6 of Appended Table 1-2 of the Order	400 cubic centimeters
(ix )	Drying units listed in row 7 of Appended Table 1-2 of the Order	700 cubic centimeters
(x)	Cleaning units listed in row 8 of Appended Table 1-2 of the Order	400 cubic centimeters
(xi )	Storage tanks listed in row 9 of Appended Table 1-2 of the Order	60,000 cubic centimeters

Appended Table 6 (Related to Article 16)

(i)	Facilities listed in row 1 of Appended Table 2 of the Order	(i) The coal-charging operation is performed by installing smokeless coal-charging equipment or installing a hood and a dust collector on the coal-charging vehicle, or by installing any equipment having an effect equal to or greater than that.
		(ii) The operation of removing baked products from a kiln is performed by installing on the guide vehicle a hood and a dust collector for processing ordinary particulates collected from the hood, or by installing any equipment having an effect equal to or greater than that; provided, however, that if it is extremely difficult to install the relevant hood on the guide vehicle due to the lack of strength in the guide vehicle or the furnace floor on which the guide vehicle runs, or the insufficiency of width of the rail for the guide vehicle, or the like, that operation is performed by installing a dustproof cover or the like.
		(iii) The fire extinction operation is performed by installing on the fire extinction tower a hurdle, a filter or any equipment having an effect equal to or greater than that.

(ii) )	Facilities listed in row 2 of Appended Table 2 of the Order	<p>If any minerals or soils and stones which may scatter ordinary particulates are to be accumulated in the unit, any of the following measures are taken:</p> <p>(i) the unit is installed in a building of a structure that prevents ordinary particulates from scattering;</p> <p>(ii) water is being sprinkled with sprinkling equipment;</p> <p>(iii) the unit is covered by a dustproof cover;</p> <p>(iv) chemical liquid is being sprayed or surface layer compaction is being carried out; or</p> <p>(v) any measures having the same or better efficiency with those listed in the preceding items shall be taken.</p>
(ii) i)	Facilities listed in row 3 of Appended Table 2 of the Order	<p>If any minerals, soils and stones, or cements which may scatter ordinary particulates are to be conveyed in the unit, any of the following measures are taken:</p> <p>(i) the unit is installed in a building of a structure that prevents ordinary particulates from scattering;</p> <p>(ii) a hood and a dust collector are installed at the loading part and the unloading part of the conveyor, and any measures listed in the item (iii) or (iv) are taken at the part of the conveyor which may be scattered with ordinary particulates, other than the loading part and the unloading part thereof;</p> <p>(iii) water is being sprinkled with sprinkling equipment;</p> <p>(iv) the unit is covered by a dustproof cover;</p> <p>(v) any measures having the same or better efficiency with those listed in the preceding items are taken.</p>
(iv) )	Facilities listed in rows 4 and 5 of Appended Table 2 of the Order	Any of the following measures are taken:

		(i) the unit is installed in a building of a structure that prevents ordinary particulates from scattering;
		(ii) a hood and a dust collector are installed;
		(iii) water is being sprinkled with sprinkling equipment;
		(iv) the unit is covered by a dustproof cover;
		(v) any measures having the same or better efficiency with those listed in the preceding items are taken.

Appended Table 7 (Related to Article 16-4)

(i)	Among work listed in Article 3-4, item (i) of the Order, work to remove spray-applied asbestos or asbestos-containing insulation materials, etc. (excluding that listed in the following row or in (v))	Remove specified building materials being used in a building, etc. to be constructed with specified particulates discharging work in compliance with the following requirements, or take any measures having the same or better efficiency than that:
		(a) isolate the place where the work removing specified building materials is to be performed (hereinafter referred to as "work area") from other places. A front chamber must be installed at the entrance of the work area when isolating the place.
		(b) keep the work area and the front chamber in negative pressure, and use a dust collector/exhauster with a HEPA filter prescribed in Japanese Industrial Standard (JIS) Z8122 for exhaust ventilation of the work area and the front chamber;

(c) Before starting the removal work on the day on which initially initiating the removal of specified building materials at the work area isolated pursuant to the provisions of (a), confirm that the dust collector/exhauster to be used works in order at the place of use, and if any abnormality is found, take necessary measures, including, but not limited to, repair of the dust collector/exhauster;

(d) Before starting and when suspending the removal work on the day on which performing the removal of specified building materials, confirm that the work area and the front chamber are kept in negative pressure, and if any abnormality is found, take necessary measures, including, but not limited to, repair of the dust collector/exhauster;

(e) wet specified building materials to be removed, using chemical solution, etc.;

(f) promptly after starting the removal work on the day on which initially initiating the removal of specified building materials at the work area isolated pursuant to the provisions of (a), if there is a change in the location where the dust collector/exhauster is used after starting the removal work of specified building materials on that day, if the filter installed on the dust collector/exhauster is replaced, or at any other time when it is necessary, confirm that the dust collector/exhauster to be used works in order by using a device capable of promptly measuring dust at the outlet of the dust collector/exhauster, and if any abnormality is found, promptly stop the removal work and take necessary measures, including, but not limited to, repair of the dust collector/exhauster;



		<p>(g) in lifting the isolation of the work area after removal of specified construction materials, spray chemical solution over the part from which specified construction materials have been removed to prevent specified particulates from scattering, and process specified particulates existing in the work area such as by cleaning them up, by doing so confirming there is no risk of specified particulates being emitted or discharged into the atmosphere.</p>
		<p>(h) in lifting the isolation of the work area after removal of specified construction materials, spray chemical solution over the part from which specified construction materials have been removed to prevent specified particulates from scattering, and process specified particulates existing in the work area.</p>
(ii )	<p>Among work listed in Article 3-4, item (i) of the Order, work to remove asbestos-containing insulation materials, etc., and remove specified building materials by a method other than scraping, cutting or crushing (excluding that listed in (v))</p>	<p>Remove specified building materials being used in a building, etc. to be constructed with specified particulates discharging work in compliance with the following requirements, or take any measures having the same or better efficiency than that:</p> <p>(a) perform curing in advance around the part from which specified building materials are to be removed;</p> <p>(b) wet specified building materials to be removed, using chemical solution, etc.;</p> <p>(c) when decommissioning the containment equipment after removal of specified construction materials, spray chemical solution over the part from which specified construction materials have been removed to prevent specified particulates from scattering, and process specified particulates existing in the work area such as by cleaning them up.</p>

(ii) i)	Among work listed in Article 3-4, items (i) or (ii) of the Order, work to remove surface coatings containing asbestos (excluding that listed in (v))	Remove specified building materials being used in a building, etc. to be constructed with specified particulates discharging work in compliance with the following requirements, or take any measures having the same or better efficiency than that:
		(a) wet specified building materials to be removed, using chemical solution, etc. (excluding when removing specified building materials as set forth in (b))
		(b) the following measures must be taken when removing specified building materials using power tools such as electric grinders: (1) the area around where specified building materials are to be removed must be contained in advance. (2) specified building materials to be removed must be wetted using chemical solution, etc.
		(c) specified particulates in the work area must be cleaned up after removal of specified construction materials. In this case, process specified particulates existing in the work area such as by cleaning them up when containment equipment put in place is to be decommissioned.
(iv) )	Among work listed in Article 3-4, items (i) or (ii) of the Order, work to remove molded boards or other construction materials containing asbestos (excluding spray-applied asbestos, asbestos-containing insulation materials, etc., and surface coatings containing asbestos; referred to as "molded boards containing asbestos, etc." in the right column of this section) (excluding those listed in (i) to (iii) and in the following row.)	Remove specified building materials being used in a building, etc. to be constructed with specified particulates discharging work in compliance with the following requirements, or take any measures having the same or better efficiency than that:

		<p>(a) Specified building materials must be taken away unchanged from a building or other such structure without cutting through, crushing them, etc.</p>
		<p>(b) When removing specified building materials (except those stipulated in (c)) by the methods in (a) is technically significantly problematic or when carrying out the work as listed in Article 3-4, item (ii) is inherently impractical, the specified building materials to be removed must be wetted using chemical solution, etc.</p>
		<p>(c) Among molded boards containing asbestos, etc., the following measures must be taken when removing those which have been specified by the Minister of the Environment as being sources of emitting or dispersing specified particulates in relatively large quantities by the methods in (a) is technically significantly problematic or when carrying out the work as listed in Article 3-4, item (ii) is inherently impractical.</p> <p>(1) the area around where specified building materials are to be removed must be contained in advance.</p> <p>(2) specified building materials to be removed must be wetted using chemical solution, etc.</p>
		<p>(d) specified particulates in the work area must be cleaned up after removal of specified construction materials. In this case, process specified particulates existing in the work area such as by cleaning them up when containment equipment put in place is to be decommissioned.</p>

		(v) Among work listed in Article 3-4, item (i) of the Order, that performed to demolish a building or other such structure in a condition dangerous for a person to enter or otherwise performed in cases where it is extremely difficult to remove specified building materials in advance in demolishing a building or other such structure Spray water over a building or other such structure to be constructed with specified particulates discharging work, or take any measures having the same or better efficiency than that.
(v)	Among work listed in Article 3-4, item (i) of the Order, that performed to demolish a building or other such structure in a condition dangerous for a person to enter or otherwise performed in cases where it is extremely difficult to remove specified building materials in advance in demolishing a building or other such structure	Spray water over a building or other such structure to be constructed with specified particulates discharging work, or take any measures having the same or better efficiency than that.
(vi)	Among work listed in Article 3-4, item (ii) of the Order, work related to spray-applied asbestos or asbestos-containing insulation materials, etc.	Removal or enclosure etc. of specified building materials used in part of a building, etc. to be constructed with specified particulates discharging work in compliance with the following requirements, or taking any measures having the same or better efficiency than those:  (a) comply with the matters listed in (a) through (g) of the right column of row (1) in cases where the specified building materials are to be removed by scraping, cutting, or crushing, or comply with the matters listed in (a) through (c) of the right column of row (2) in cases where the specified building materials are to be removed by other methods;

		<p>(b) when conducting enclosure etc. of specified building materials, confirm the degradation condition of the specified building materials and the bonding condition of the specified building materials with the ground, and if the degradation is remarkable or the bonding with the ground is bad, then remove the specified building materials.</p>
		<p>(c) the provisions of (a) through (g) of the right column of row (1) shall be applied when carrying out the enclosure of spray-applied asbestos or the enclosure, etc. of asbestos-containing insulation materials, etc. (limited to where the cutting, crushing, etc. of these building materials is involved) or the containment of spray-applied asbestos. In this case, "removing" is read as "conducting enclosure etc." and "removal" is read as "enclosure etc."</p>