

POLAND

14 March 1990

Executive Order on Air Pollution Published

[Executive Order No. 92 of the Ministry of Environmental Protection, Natural Resources, and Forestry dated 12 February 1990 on air pollution]

Pursuant to Article 29 of the Decree of 31 January 1980 on the Protection and Shaping of the Environment (Dz.U., No. 3, Item 6, 1980; No. 44, Item 201, 1983; No. 33, Item 180, 1987; and No. 26, Item 139, and No. 35, Item 192, 1989), the following is hereby ordered:

Paragraph 1.1. Permissible concentrations of air pollutants are determined separately for specially protected areas and for remaining areas.

1.2. Specially protected areas comprise spa areas, spa protection areas, national parks, nature preserves, and landscape parks.

Paragraph 2.1. The permissible concentrations of air pollutants for specially protected and remaining areas are defined in Supplement No. 1.

2.2. The permissible concentrations of air pollutants specified in Supplement No. 1 do not apply to areas occupied by organizational units engaging in economic activities causing air pollution.

2.3. The areas referred to in Subparagraph 2 are governed by the regulations prescribing the maximum permissible concentrations and intensities of noxious substances at workplaces.

Paragraph 3.1. A decision defining the permissible kinds and quantities of air pollutants, hereinafter termed "the decision on the permissible emission," is issued for a specified period of time by a voivodship-level local office of state administration. The organizational unit is dutybound to submit documentation that contains in particular:

- 1) Description of the technologies employed.
- 2) Characteristics of discrete emitters.
- 3) Data on operating time of the organizational unit in the course of a year, separately for each emitter.
- 4) Description of the kinds and quantities of soot and gaseous pollutants in metric tons per year, in kilograms per hour (mean values), in grams per second (maximum values), and in kilograms per output unit for discrete sources of emission and emitters.
- 5) Description of the nature of pollutant-purification facilities and of the effectiveness of their action.
- 6) Description of the circumstances under which pollutants are spewed into the air.
- 7) The existing state of air pollution and the state anticipated as a result of the operations of the organizational unit.

8) Description of the occurrence time and extent of maximum concentrations of emitted substances and their quantities.

9) Conditions of the propagation of pollutants in the air.

10) Plans for measures to reduce the air pollution caused by the operations of the organizational unit.

3.2. The decision on the permissible emission specifies the kinds and quantities of the pollutants permitted to spread in the air, jointly and separately for every emission source and emitter, and the conditions of their spewing into the air.

3.3. The decision on the permissible emission may impose obligations ensuing from the need to prevent air pollution.

3.4. The obligations referred to in Subparagraph 3 may be imposed by a separate decision also after the permissible emission is determined.

Paragraph 4.1. The permissible quantities of such air pollutants as sulfur dioxide, nitrogen dioxide, and the soot arising in the process of the combustion of fuels at power plants are defined in Supplement No. 2.

4.2. To adhere to the requirements specified in Paragraph 5, the voivodship-level local office of state administration fixes for the sources of pollutant emission values of permissible emission lower than those given in Supplement No. 2.

Paragraph 5. The permissible emission of air pollutants specified in the decision on permissible emission may not result in excess pollutant concentrations on the specially protected and remaining areas referred to in Paragraph 1.

Paragraph 6.1. Organizational units which spew from a single emitter more than 1,200 kg of sulfur dioxide or 800 kg of soot per hour into the air are dutybound to conduct continuous measurements of the quantities of these substances emitted into the air.

6.2. The organizational units which spew more than 100 kg of sulfur dioxide, or more than 100 kg of soot, per hour into the air are dutybound to conduct twice a year, at times coordinated with the local voivodship-level agency of state administration, measurements of the quantities of these substances spewed into the air.

6.3. The units referred to in Subparagraphs 1 and 2 are dutybound to evaluate at least once every two years the effectiveness of their pollution-control facilities.

6.4. The voivodship-level local office of state administration acts as follows with respect to the measurements conducted by the organizational units:

1) It specifies the kinds of substances subject to the measurements and the specific conditions for the conduct of the measurements.

2) It monitors the accuracy of the measurements and, as the need arises, conducts control measurements on its own.

Paragraph 7. The provisions concerning organizational units apply correspondingly to individuals who engage in economic activity.

Paragraph 8. Whenever this Executive Order refers to a voivodship-level local office of state administration, it is construed to mean an office competent for matters concerning environmental protection in a voivodship.

Paragraph 9. Proceedings initiated or not completed by the effective date of this Executive Order shall be completed in accordance with the provisions of this Executive Order.

Paragraph 10. The Executive Order of the Council of Ministers of 30 September 1980 Concerning the Protection of Atmospheric Air Against Pollution (Dz.U., No. 24, Item 89), is hereby voided.

Paragraph 11. This Executive Order takes effect 14 days after it is published.

Minister for Environmental Protection, Natural Resources, and Forestry: B. Kaminski.

Supplement No. 1 to the Executive Order of the Minister for Environmental Protection, Natural Resources, and Forestry of 12 February 1990 (Item 92)

Permissible Concentrations of Air Pollutants

No.	Pollutant Pollutants in Micrograms/cm m	Permissible Concentration of		
		30 Minutes 3	24 Hours 4	Mean Annual 5
1	Acrylonitrile n1	--	2	0.5
2	Acetaldehyde	20	10	2.5
3	Methyl alcohol	1,000	500	130
4	Ammonia	400.04	200	51
5	Aniline	50	30	10
6	Arsenic n2	--	0.05	0.01
7	Asbestos n3 (fibers/cu m)	--	1,000	--
8	Azotanes n4	200	100	25
9	Nitrogen dioxide	500	150	50
10	Benzene	--	10	2.5
11	Benzo/a/pyrene (ng/cu m)	--	5	1

12	Chlorine	100	30	4.3
13	Vinyl chloride	--	5	1.3
14	Chromium n5	--	2	0.4
15	Hydrogen cyanide and other cyanides n6	20	10	2.5
16	Perchloroethylene	600	300	70
17	Dichloromethane	400	150	60
18	1-, 2-dichloroethane	400	150	60
19	Carbon disulfide	50	20	3.8
20	Phenol	20	10	2.5
21	Fluorine n7	30	10	1.6
22	Formaldehyde	50	20	3.8
23	Phthalates	100	50	13
24	Cadmium n8	--	0.22	0.01
25	Xylene	300	100	16
26	Sulfuric acid n9	200	100	16
27	Hydrochloric acid n10	200	100	20
28	Manganese n11	--	4	1
29	Copper n12	20	5	0.6
30	Nickel n13	--	100	25
31	Nitrobenzene	50	30	10
32	Vinyl acetate	100	--	--
33	Lead n14	--	1	0.2
34	Ozone	100	30	--
35	Dust suspension	--	120	50
36	Mercury n15	--	0.3	0.04

37	Sulfur dioxide: through 1998	600	200	32
	Sulfur dioxide: starting in 1999	440	150	32
38	Hydrogen sulfide	30	5	1
39	Styrene	20	--	--
40	Carbon monoxide	5,000	1,000	120
41	Toluene	300	200	50
42	Trichloroethylene	400	150	60
43	Vanadium n16	--	1	0.25
44	Carbon	150	50	8

Permissible Concentrations of Air Pollutants

No.	Pollutant	Permissible Concentration of		
		Pollutants in Micrograms/cm m		
			Specially Projected Areas	
1	2	30 Minutes	24 Hours	Mean Annual
		6	7	8
1	Acrylonitrile n1	--	2	0.5
2	Acetaldehyde	10	5	1.3
3	Methyl alcohol	200	100	25
4	Ammonia	100	50	13
5	Aniline	20	10	2.5
6	Arsenic n2	--	0.05	0.01
7	Asbestos n3 (fibers/cu m)	--	1,000	--
8	Azotanes n4	50	30	10
9	Nitrogen dioxide	150	50	30
10	Benzene	--	10	2.5
11	Benzo/a/pyrene (ng/cu m)	--	5	1
12	Chlorine	30	10	1.6

13	Vinyl chloride	--	3	0.4
14	Chromium n5	--	0.5	0.08
15	Hydrogen cyanide and other cyanides n6	10	5	1.3
16	Perchloroethylene	200	120	30
17	Dichloromethane	100	60	15
18	1-, 2-dichloroethane	100	60	15
19	Carbon disulfide	15	4.5	0.6
20	Phenol	10	3	0.4
21	Fluorine n7	10	3	0.4
22	Formaldehyde	20	10	2.5
23	Phthalates	30	10	1.6
24	Cadmium n8	--	0.2	0.001
25	Xylene	40	10	1.3
26	Sulfuric acid n9	100	50	7.9
27	Hydrochloric acid n10	100	50	10
28	Manganese n11	--	2	0.5
29	Copper n12	6	2	0.3
30	Nickel n13	--	100	25
31	Nitrobenzene	20	10	2.5
32	Vinyl acetate	50	--	--
33	Lead n14	--	0.5	0.1
34	Ozone	50	20	--
35	Dust suspension	--	60	40
36	Mercury n15	--	0.1	0.02
37	Sulfur dioxide: through 1998	250	75	11

	Sulfur dioxide: starting in 1999	150	75	11
38	Hydrogen sulfide	4	1	0.5
39	Styrene	10	--	--
40	Carbon monoxide	3,000	500	61
41	Toluene	100	50	13
42	Trichloroethylene	50	10	1.2
43	Vanadium n16	--	0.1	0.0005
44	Carbon	50	20	4

n1 in aerosol form

n2 in soot suspension

n3 in soot suspension

n4 NO[3] compounds in soot suspension

n5 degree of oxidation + in soot suspension

n6 HCN compounds

n7 in form of fluorine and water-soluble fluorides

n8 as sum of cadmium and its compounds in soot suspension

n9 in aerosol form

n10 in form of gas and aerosol

n11 in soot suspension

n12 Cu compounds in soot suspension

n13 in soot suspension

n14 as sum of lead and its compounds in soot suspension and in aerosols

n15 In gaseous phase and in soot suspension, as sum of

n16 In soot suspension

NOTE: The permissible concentrations of air pollutants are considered as adhered to if their

values, as tabulated above in columns 3, 4, 6, and 7, are at most exceeded by a factor of two for 0.2 percent of the time during a year with respect to 30-minute concentrations and for two percent of the time during a year with respect to 24-hour concentrations.

Permissible Fallout of Air Pollutants			
No.	Pollutant	Areas	Specially Protected Areas
1	Cadmium *	10 mg/sq m/year	10 mg/sq m/year
2	Lead **	100 mg/sq m/year	100 mg/sq m/year
3	Dust, total	200 g/sq m/year	40 g/sq m/year

* as sum of cadmium and its compounds

** as sum of lead and its compounds

Supplement No. 2 to the Executive Order of the Minister of Environmental Protection, Natural Resources, and Forestry of 12 February 1990 (Item 92)

Permissible Limits on the Emission Into the Air of the Sulfur Dioxide, Nitrogen Dioxide, and Dust Arising in the Process of the Combustion of Coal at Power Plants, in Grams/GJ

Fuel	Furnace	Facilities		
		Group A		
1	2	SO[2] 3	NO[2] * 4	Dust 5
Black coal	Stationary grate furnace	990	35	1,850
Black coal	Stoker	990	160	800
Black coal	Coal-dust furnace with liquid ash removal	1,240	495	170
Black coal	Coal-dust furnace with dry ash removal	1,240	330	260
Brown coal	Coal-dust furnace with liquid ash removal	1,540	225	140
Brown coal	Coal-dust furnace with dry ash removal	1,540;	225	195
Coke	Stationary grate furnace	410	45	170
Coke	Stoker	500	145	310
Fuel oil	Installed capacity	1,720	120	--
Fuel oil	Installed capacity 50-MW boilers	1,720	160	--

Natural gas	Installed capacity	--	60	--
Natural gas	Installed capacity 50-MW boilers	--	145	--
Wood	Grate furnace	--	50	--

Fuel	Furnace	Facilities		
		Group B		
1	2	SO[2] 6	NO[2] 7	Dust 8
Black coal	Stationary grate furnace	720	35	1,370
Black coal	Stoker	640	95	600
Black coal	Coal-dust furnace with liquid ash Bremoval	870	170	90
Black coal	Coal-dust furnace with dry ash removal	870	170	130
Brown coal	Coal-dust furnace with liquid ash removal	1,070	150	70
Brown coal	Coal-dust furnace with dry ash1,070 removal	150	95	
Coke	Stationary grate furnace	410	45	235
Coke	Stoker	250	145	235
Fuel oil	Installed capacity	1,250	120	--
Fuel oil	Installed capacity 50-MW boilers	170	160	--
Natural gas	Installed capacity	--	35	--
Natural gas	Installed capacity 50-MW boilers	--	85	--
Wood	Grate furnace	--\$50	--	

Fuel	Furnace	Facilities		
		Group C		
		SO[2]	NO[2]	* Dust

1	2	9	10	11
Black coal	Stationary grate furnace	650	35	1,370
Black coal	Stoker	200	95	600
Black coal	Coal-dust furnace with liquid ash removal	200	170	90
Black coal	Coal-dust furnace with dry ash removal	200	170	130
Brown coal	Coal-dust furnace with liquid ash removal	200	150	70
Brown coal	Coal-dust furnace with dry ash removal	200	150	95
Coke	Stationary grate furnace	410	45	235
Coke	Stoker	250	110	235
Fuel oil	Installed capacity	1,250	90	--
Fuel oil	Installed capacity 50-MW boilers	170	120	--
Natural gas	Installed capacity	--	35	--
Natural gas	Installed capacity 50-MW boilers	--	85	--
Wood	Grate furnace	--	50	--

* denotes the sum of nitric oxide and nitrogen dioxide converted to nitrogen dioxide

The quantities given in the above table should be applied to facilities with an installed capacity of upward of 0.2 MW[t].

The quantities given in the above table concern the emission of pollutants relative to the chemical energy flux/the mathematical product of the consumption of fuel and the calorific value of that fuel/introduced in the fuel into the power generating process.

New facilities must meet the requirements specified for Group C.

New facilities are considered to be:

-- Facilities put into operation after 31 December 1994.

-- Facilities whose construction commences after this Executive Order takes effect.

As for the facilities existing on the effective date of this Executive Order: During the period until 31 December 1997 they must meet the requirement specified for Group A; and after 31 December 1997 they must meet the requirements specified for Group B -- these requirements are considered to be satisfied in the event that they are met with respect to overall emission from all activated sources prior to the effective date of this Executive Order.

Facilities which do not qualify for the above classification must by 31 December 1997 meet the requirements for the facilities existing after that date, and after 31 December 1997 they must meet the requirements for Group C.