

THE GOVERNMENT OF THE REPUBLIC OF CROATIA

Pursuant to Article 39 paragraph 2 of the Air Protection Act (Official Gazette 178/2004 and 60/2008), the Government of the Republic of Croatia at its session on 27 November 2008 adopted the following

REGULATION

ON EMISSION CEILINGS FOR CERTAIN POLLUTANTS IN THE REPUBLIC OF CROATIA

Article 1

(1) This Regulation stipulates pollutants, their emission ceilings in the specified period in the Republic of Croatia and the method of preparation of annual emission inventories.

(2) The emission ceilings referred to in paragraph 1 of this Article are established for the purpose of limiting emissions of certain pollutants on the territory of the Republic of Croatia in order to improve the protection of the environment and human health against the risk of adverse effects from acidification, soil eutrophication and ground-level ozone and to move towards the long-term objectives of not exceeding critical levels and loads.

Article 2

(1) The emission ceilings referred to in Article 1 of this Regulation are established for emissions of sulphur dioxide, nitrogen oxides, ammonia and volatile organic compounds (VOC) on the territory of the Republic of Croatia.

(2) The provisions of this Regulation do not apply to:

- emissions from international maritime traffic, and
- aircraft emissions beyond the landing and take-off cycle.

Article 3

For the purposes of this Regulation the following definitions apply:

1. AOT 40 means the sum of the difference between hourly concentrations of ground-level ozone greater than $80 \mu\text{g}/\text{m}^3$ (= 40 ppb) and $80 \mu\text{g}/\text{m}^3$ during daylight hours accumulated from May to July each year;
2. AOT 60 means the sum of the difference between hourly concentrations of ground-level ozone greater than $120 \mu\text{g}/\text{m}^3$ (=60 ppb) and $120 \mu\text{g}/\text{m}^3$ accumulated throughout the year;
3. emission means the release of a substance from a stationary or mobile source into the atmosphere;

4. critical load means a quantitative estimate of an exposure to one or more pollutants below which significant adverse effects on specified sensitive elements of the environment do not occur, according to present knowledge;
5. critical level means the concentration of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur, according to present knowledge;
6. grid cell means a square 50 km x 50 km, which is the resolution used when mapping critical loads on a European scale, and also when monitoring emissions and depositions of air pollutants under the Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe (EMEP);
7. CORINAIR Guidebook is the abbreviation for the EMEP Atmospheric Emission Inventory Guidebook;
8. landing and take-off cycle means a cycle represented by the following time in each operating mode: approach 4,0 minutes; taxi/ground idle 26,0 minutes, take-off 0,7 minutes; climb 2,2 minutes;
9. national emission ceiling means the maximum amount of a substance expressed in kilotonnes, which may be emitted from an individual state in a calendar year;
10. nitrogen oxides and NO_x mean nitric oxide and nitrogen dioxide, expressed as nitrogen dioxide;
11. ground-level ozone means ozone in the lowermost part of the troposphere;
12. volatile organic compounds and VOC mean all organic compounds arising from human activities, other than methane, which are capable of producing photochemical oxidants by reactions with nitrogen oxides in the presence of sunlight;
13. pollutant emission inventory means a data base organised on a sectoral basis, containing data required for calculation and reporting on all pollutant emissions, especially emission factors, data on activities, calculated emission values, key emission source categories, additional information and assumptions used for calculations, including data on recalculation of emissions;
14. annual emission report means the report on all pollutant emissions on the territory of the Republic of Croatia, prepared annually, according to the scope and format set out under the 1979 Convention on Long-range Transboundary Air Pollution and its Protocols (hereinafter: LRTAP Convention) and according to the decisions and guidelines of the Convention's Executive Body;
15. report on the implementation of policies and measures for emission abatement means the report on national policies and measures limiting and/or reducing pollutant emissions, including quantitative estimates of the effect of policies and measures, presented on a sectoral basis for each pollutant;

16. emission projection means quantified emission values in the upcoming long-term period based on expected development scenarios in individual sectors;

17. emission factor means a numerical value relating the amount of substance emitted to the quantity of product, consumed fuel or raw material, or the amount of work accomplished for a certain activity, process or environmental protection procedure. It is expressed in units of pollutant weight by the unit of source activity (e.g. kg/t of product, kg/t of raw material, kg/t of fuel consumed, kg/GJ of energy produced, kg/capita etc.);

18. activity data means a numerical value expressing the total amount of product, consumed fuel or raw material, or the amount of work accomplished for a certain activity;

19. recalculation means the calculation procedure to re-evaluate previously submitted estimates of emissions by sources in the previously submitted inventory reports as a result of improvement in methodologies, emission factors and activity data or the inclusion of new source categories;

20. quality control means a system of standard technical activities for measuring and monitoring the quality of the emission inventory, undertaken during its preparation;

21. quality assurance means planned and systematic actions and activities performed by an independent body required to certify that the emission inventory is in compliance with the quality requirements;

22. quality assurance and control plan means a document defining the activities, means, deadlines, responsibilities and sequence of implementation of activities to assure and control the quality of the emission inventory;

23. sector means one of the following 11 sectors monitored under the LRTAP Convention: (1) combustion in heating plants and energy transformation plants, (2) combustion in non-industrial processes, (3) industrial combustion; (4) production processes; (5) extraction and distribution of fossil fuels and geothermal energy; (6) solvent and other product use, (7) road transport; (8) other mobile sources and machinery; (9) waste treatment and disposal; (10) agriculture; (11) other sources and sinks.

Article 4

(1) Total pollutant emission ceilings, to be attained by 31 December 2010, are as follows:

- sulphur dioxide 70 kilotonnes
- nitrogen dioxide 87 kilotonnes
- ammonia 45 kilotonnes
- volatile organic compounds 90 kilotonnes.

(2) Emission ceilings referred to in paragraph 1 of this Article shall not be exceeded in the years following the year 2010.

(3) For the purpose of attainment of the emission ceilings referred to in paragraph 1 of this Article a programme for gradual abatement of emissions for certain pollutants in the Republic of Croatia until the year 2010 with emission projections for the period from 2010 to 2020.

(4) The emission projections referred to in paragraph 3 of this Article shall include:

- projections »without measures«, »with measures« and »with additional measures« for the period from 2010 to 2020;
- description of policies and measures included in the projections;
- analysis of projection sensitivity;
- description of methodology, model, assumptions and input data for projection development.

Article 5

(1) The programme referred to in paragraph 3 Article 4 of this Regulation shall be prepared by the Ministry of Environmental Protection, Physical Planning and Construction (hereinafter: the Ministry).

(2) The programme shall be adopted by the Government of the Republic of Croatia.

(3) The programme shall be published in the Official Gazette.

Article 6

For the purpose of attainment of emission ceilings referred to in paragraph 1 Article 4 of this Regulation the following interim environmental objectives are established:

- acidification: the areas where critical loads are exceeded shall be reduced by at least 50 % (in each grid cell) compared with the 1990 situation;
- health-related ground-level ozone exposure: the ground-level ozone load above the critical level for human health (AOT₆₀=0 ppm.h) shall be reduced by two-thirds in all grid cells compared with the 1990 situation. In addition, the ground-level ozone load shall not exceed an absolute limit of 2,9 ppm.h in any grid cell;
- vegetation-related ground-level ozone exposure: the ground-level ozone load above the critical level for crops and semi-natural vegetation (AOT₄₀=3 ppm.h) shall be reduced by one-third in all grid cells compared with the 1990 situation.

Article 7

(1) Monitoring pollutant emissions on the territory of the Republic of Croatia shall be accomplished through:

- the pollutant emission inventory on the territory of the Republic of Croatia in accordance with LRTAP Convention obligations,

- the annual emission report with emission projections,
- the report on the implementation of policies and measures for emission abatement with the aim of meeting the obligations under the LRTAP Convention.

(2) In addition to the annual emission report, the distribution of emissions in the spatial grid and anticipated significant changes in the geographical distribution of national emissions shall be indicated for each five-year period.

Article 8

(1) Activities for the preparation of the emission inventory and annual emission reports include:

- inventory of emissions from all sources by sector and by each pollutant,
- quantified estimate of the uncertainty of the inventory referred to in indent 1 of this paragraph for each emission source in the sector and for the inventory as a whole,
- identification of key pollutant emission sources,
- recalculation of emissions in case of improvement in methodologies, emission factors, activity or sectoral data, the inclusion of new emission source categories in the sector or the application of review methodologies,
- implementation and reporting on quality control procedures in accordance with the quality assurance and control plan,
- preparation of the annual emission reports including all additional requirements in accordance with the LRTAP Convention.

(2) For the preparation of emission inventories and annual emission reports the joint EMEP/CORINAIR Guidebook adopted under the LRTAP Convention and published on the web site of the Croatian Environment Agency (hereinafter: the Agency) shall be used.

(3) The annual emission report referred to in paragraph 1 indent 6 of this Article shall include emissions from all the sources in the sectors for the period from the base year to the year preceding the current year in which the report is being drawn up.

Article 9

(1) For the purposes of developing the emission inventory and the annual emission report the Agency shall perform the following tasks:

- develop the annual data collection programme by sectors referred to in Appendix I, pursuant to the quality assurance and control plan,
- set up and maintain the pollutant emission inventory,

– carry out the emission calculation procedure in accordance with the quality assurance and control plan for the emission inventory,

– keep archives on data on sectors for emission calculation, emission factors and documents used for planning, preparation, control and assurance of quality of the emission inventory.

(2) For the purposes of technical review and evaluation of the inventory and pollutant emission report on the territory of the Republic of Croatia, at the request of the expert body of the Executive Body of the LRTAP Convention, the Agency shall provide it with all data and documents referred to in paragraph 1 indent 4 of this Article.

Article 10

(1) The programme referred to in paragraph 1 indent 1 Article 9 includes activity data which relate to the current calendar year and are submitted to state administration bodies and legal persons with public authorities referred to in Appendix I of this Regulation by 15 December of the current year.

(2) For the purposes of recalculation of the emissions referred to in paragraph 1 indent 1 Article 7 of this Regulation, data from the preceding years until the base year shall also be submitted.

Article 11

State administration bodies and other legal persons with public authorities referred to in Appendix I of this Regulation shall submit activity data and emission data by sectors required for preparing the pollutant emission inventory on the territory of the Republic of Croatia, according to the annual programme referred to in Article 10 of this Regulation, to the Agency by 30 September of the following year, in electronic form.

Article 12

(1) The Agency shall submit the Report on annual pollutant emissions on the territory of the Republic of Croatia to the Ministry by 31 December of the current year, for the preceding calendar year.

(2) The Ministry shall review and approve the Report referred to in paragraph 1 of this Article.

(3) The Agency shall publish the approved Report on annual pollutant emissions on its web site.

Article 13

The Ministry shall prepare the Report on the implementation of policies and measures for emission abatement, with the aim of meeting the obligations arising from the LRTAP Convention and submit it to the Executive Body of the LRTAP Convention within the deadlines and in the scope and format set out in the LRTAP Convention.

Article 14

(1) The Ministry shall mediate and exchange data on pollutant emissions with international organisations and the parties to the LRTAP Convention.

(2) The Ministry shall mediate and exchange data with competent bodies and organisations of the European Union in the manner and within the deadlines prescribed under EU legislation.

Article 15

Appendix I is published along with this Regulation and represents an integral part thereof.

Article 16

This Regulation shall enter into force on the eighth day after the day of its publication in the Official Gazette, with the exception of paragraph 2 Article 14 of this Regulation which shall enter into force on the day of accession of the Republic of Croatia to the European Union.

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Reg. No: 5030105-08-1
Zagreb, 27 November 2008

Prime Minister
Ivo Sanader, m.p.

APPENDIX I

LIST OF STATE ADMINISTRATION BODIES AND OTHER LEGAL PERSONS WITH PUBLIC AUTHORITIES FOR DATA SUBMISSION

Competent Authority	Sector
Ministry of the Economy, Labour and Entrepreneurship	(1) combustion in heating plants and energy transformation plants
Central Bureau of Statistics	(2) combustion in non-industrial processes
Croatian Environment Agency Central Bureau of Statistics	(3) industrial combustion
Ministry of Environmental Protection, Physical Planning and Construction	(4) production processes
Croatian Environment Agency	(6) solvent and other product use
Central Bureau of Statistics	(5) extraction and distribution of fossil fuels and geothermal energy
Ministry of the Interior	(7) road transport
Ministry of the Economy, Labour and Entrepreneurship	(8) other mobile sources and machinery
Ministry of the Sea, Transport and Infrastructure	

Croatian Environment Agency	(9) waste treatment and disposal
Ministry of Agriculture, Fisheries and Rural Development	(10) agriculture
Ministry of Forestry, Water Management and Regional Development	(11) other sources and sinks

PROVISIONAL TRANSLATION