

LEGAL PROTECTION OF THE AMBIENT AIR FROM POLLUTION IN THE REPUBLIC OF BULGARIA: CURRENT PROBLEMS¹

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ABSTRACT: This scientific study is dedicated to the legal protection of the ambient air in the Republic of Bulgaria. Its actuality is related to increasing degradation of this natural resource on a national and global level. The attention is paid to the legal measures for its protection according to special and general Bulgarian environmental legislation as well as to liability for infringement of the legislation. Finally, some general conclusions and recommendations are given from the examined regulation.

KEY WORDS: Ambient Air, Legal Protection, Republic of Bulgaria.

РЕЗЮМЕ: Това научно изследване е посветено на правната защита на атмосферния въздух от замърсяване в Република България. Неговата актуалност е свързана с нарастващата деградация на този природен ресурс на национално и глобално равнище. Вниманието е насочено към правните мерки за неговото опазване съгласно специалното и общото българско екологично законодателство, както и към юридическата отговорност за нарушаване на законодателството. Накрая са направени някои по-общи изводи и препоръки, свързани с разгледаната правна уредба.

КЛЮЧОВИ ДУМИ: атмосферен въздух, правна защита, Република България.

1. Introduction

It is well known the importance of the ambient air (hereinafter in brief - "Air") for the existence of the biosphere and the performance of the climatic and hydrological processes on Earth. The actuality of the protection of this natural resource from pollution is related to its increasing degradation on a national and global level. For example, the United Nations Environment Programme (UNEP) points out that worldwide 99 million tons of sulphur oxides (SO_x), 68 million tons of nitrogen oxides (NO_x), 57 million tons of suspended particulate matter and 177 million tons of carbon monoxide (CO) were released into the atmosphere in 1990 as result of human activities from both stationary and mobile sources³. Besides, according to UNEP, some volatile organic chemicals have been detected in air⁴. The greenhouse gas emissions, among which the largest amount of carbon dioxide (CO₂) cause emerging dangerous for mankind climate change (in particular so called "global warming")⁵. The harmful effects from the global warming of our planet however, are difficult to predict. Climate change therefore emerges as one of the most important and complex environmental problems that need to be resolved on the one hand by well balanced national

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³ See *Saving Our Planet. Challenges and Hopes*, Nairobi: UNEP, 1992, p. 1.

⁴ *Ibidem*, p. 2.

⁵ *Ibidem*, p. 17. See also Пенчев, Г., *Екологично право. Специална част*, София: Феня, 2012, с. 18 – 20 и цитираната там литература.

legislation on air pollution protection and on the other hand effective international cooperation in this area⁶.

Another problem not only with national but also with cross-border environmental importance is the air pollution with sulfur and nitrogen oxides, which leads to the so-called "acid rain" damaging the soil, water, forests and corrosion of metals. These pollutants are mainly emitted from the thermal power plants (TPPs). Some Bulgarian scientists show ships as an additional source of air pollution in the area of sea ports, because of the use of ship fuel with big content of sulphur, low height of depositing of the emissions of exhaust gases and little speed of depositing of these gases⁷.

A third national and global air quality problem is related to the depletion of the ozone layer of the stratosphere caused by the release of ozone-depleting substances, especially chlorofluorocarbons, mainly from the production of refrigeration and cosmetics⁸. It is obvious that the protection of the air from pollution is one of the significant environmental problems of contemporary mankind⁹.

In the Bulgarian specialized ecological literature is shown that in general the air quality in a number of areas and larger settlements in Bulgaria is still unsatisfactory, especially with regard to emissions of total dust, (SO_x), (NO_x), CO, ammonia, cadmium and hydrogen sulphide exceeding the average annual limit values¹⁰. According to data of the Executive Environment Agency (EEA) to the Minister of Environment and Waters (MEW) for the period 1990 - 2015, the emissions of particulate matter (PM_{2,5}) increased by 37% and in 2015 compared to 2014, emissions of other kind of particulate matter (PM₁₀) were increased with 3.66 kt, and in both cases as a reason is shown "increased use of wood for household use"¹¹, but for (PM₁₀) is noted as additional reason "increased emissions from non-combustible production processes and road transport"¹². In this respect, it should also be noted that the first judgment against the

⁶ For the international collaboration in this field, see for example Bothe, M., E. Rehbinder, *Climate Change as a Problem of Law and Policy*, in: *Climate Change Policy*, Utrecht: Eleven International Publishing, 2005, pp. 1 – 16; Rajamani, L., *Legal Principles Relating to Climate Change*, in: *The International Law Association. Report of the Seventy-Fifth Conference held in Sofia, August, 2012*, London: The International Law Association, 2012, pp. 432 – 489.

⁷ See Козарев, Н., С. Стоянов, Н. Илиева, *Замърсяване на въздуха в пристанищни райони*, в: *Екологичен мениджмънт на пристанищни райони. Повишаване на квалификацията на пристанищните власти и всички заинтересовани представители на обществото в България*, Б.м.: Фламандско-български проект BUL/017/02, 2004, с. 181.

⁸ On the general ecological problems of the protection of the air from pollution, see for example *Saving Our Planet. Challenges and Hopes*, pp. 10 – 12; Бринчук, М., *Екологическо право*, Москва: Городец, 2009, с. 404 – 405; *Световният екологичен проблем*, София: Партиздат, 1984, с. 18 – 20; Пенчев, Г., *Цит. съч.*, с. 20 – 21.

⁹ See for example *Световният екологичен проблем*, с. 15 – 20; Стайнов, П., *Защита на природата (правни изследвания)*, София: БАН, 1970, с. 193 – 201; Kiss, A., D. Shelton, *International environmental law*, Ardsley-on-Hudson (New York): Transnational Publishers, Inc., 1991, pp. 227 – 231; Kiss, A., D. Shelton, *Manual of European environmental law*, Cambridge: Grotius Publications Limited, 1993, pp. 341, 343 – 344, 346 – 347; *Saving Our Planet. Challenges and Hopes*, pp. 1 – 23; Shelton, D., A. Kiss, *Judicial Handbook on Environmental Law*, Nairobi: UNEP, 2005, p. 79.

¹⁰ See *Национална стратегия по околна среда и План за действие 2000 - 2006 г.*, София: Министерски съвет, 2001, с. 73 – 74; Ганчев, П., *Основни идеи и принципи на Национална стратегия за устойчиво развитие на Република България: научно – приложен проект*, София: Министерство на околната среда и водите, 2005, с. 127.

¹¹ See *Национален доклад за състоянието и опазването на околната среда. [2015 г.]*, София: Министерство на околната среда и водите – Изпълнителна агенция по околна среда, 2017, с. 3, в: *Изпълнителна агенция по околна среда* [онлайн], [прегледан 23.04.2018], Достъпно от: <http://eea.government.bg/bg/soer/2015> Също достъпно в pdf и от: <http://eea.government.bg/bg/soer/2015/soer-bg-2015.pdf>

¹² *Ibidem*, p. 4.

Republic of Bulgaria by the Court of Justice of the European Union (CJEU) in the field of environmental protection, passed in 2017, was related to the quality of ambient air and, in particular, to the failure of an obligation by a directive relating to the level of PM¹³. The EEA to the MEW shows as a sources of air pollution in Bulgaria mainly TPPs, road and other kinds of transport, domestic combustion, combustion processes in the industry and non-combustion processes, the use of solvents and agriculture¹⁴. It was found, however, that in the period 1990 - 2015 there is a tendency in Bulgaria to reduce the emissions of sulfur and nitrogen oxides and ammonia, and in the period 1988 - 2015 also to the reduction of the main greenhouse gas emissions¹⁵.

The legal protection of the air from pollution in Bulgaria includes legal measures in this field according to the sectorial ("special") and general environmental legislation, as well as to liability for infringement of the legislation. Besides, Republic of Bulgaria is a regular member of the European Union (EU) since 2007 that is why its legislation in the examined field is influenced from the EU law. Hereinafter, in general, will be examined the legal framework for protection of the air from pollution under the existing Bulgarian legislation, in force on June 08, 2018.

2. Normative acts on the protection of the air from pollution

The special law in the examined field is the Ambient Air Quality Act, 1996 (AAQA – State Gazette (SG), No. 45 of 1996, as amended). Subsidiary implementation will find some laws, such as: the Environmental Protection Act, 2002 (EPA - SG, No. 91 of 2002, as amended), the Climate Change Reduction Act, 2014 (CCRA – SG, No. 22 of 2014, as amended), the Carbon Dioxide Storage in the Earth Bowels Act, 2012 (CDSEBA - SG, No. 14 of 2012, as amended), the Road Traffic Act, 1999 (SG, No. 20 of 1999, as amended), the Registration and Control of Agricultural and Forestry Equipment Act, 1998 (SG No. 79 of 1998, as amended), the Spatial Development Act, 2000 (SG, No. 1 of 2001, as amended), the Public Health Act, 2004 (SG, No. 70 of 2004, as amended) and the Penal Code, 1968 (PC – SG, No. 26 of 1968, as amended), as well as secondary regulations on their implementation.

3. Legal measures for protection of the air from pollution

3.1. Legal measures under the AAQA, 1996

¹³ See Case C-488/15 *European Commission vs. Republic of Bulgaria*, Judgment of the Court of 05 April 2017, in: *EUR-Lex. Access to European Union Law* [online], [viewed 14.05.2018], Available from: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:62015CA0488&qid=1526239581049&from=EN>

In p. 1 of the operative part of this judgment CJEU declares that:

"- by exceeding the daily and annual limit values for PM₁₀ concentrations systematically and continuously from 2007 until 2014 inclusive in the zones and agglomerations BG0001 AG Sofia, BG0002 AG Plovdiv, BG0004 North Bulgaria, BG0005 South-West Bulgaria and BG0006 South-East Bulgaria;

- by exceeding the daily limit value for PM₁₀ concentrations systematically and continuously from 2007 until 2014 inclusive in the zone BG0003 AG Varna and the annual limit value in 2007, 2008 and from 2010 until 2014 inclusive in zone BG0003 AG Varna,

the Republic of Bulgaria has failed to fulfil its obligations under the provisions of Article 13(1) of, in conjunction with Annex XI to, Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe, and

- in view of the fact that the daily and annual limit values for PM₁₀ concentrations in all of the abovementioned zones and agglomerations continued to be exceeded, the Republic of Bulgaria has failed to fulfil its obligations under the second subparagraph of Article 23(1) of that directive and in particular the obligation to keep the exceedance period as short as possible, as regards the period from 11 June 2010 to the year 2014 inclusive".

¹⁴ See *Национален доклад за състоянието и опазването на околната среда. [2015 г.]*, с. 7.

¹⁵ *Ibidem*, p. 8.

Hereinafter below will be enumerated some more important legal measures under this act.

- Special rules related to the norming of the quality of the air in urban and non-urbanized areas (art. 4 - 8).

In art. 4, par. 1, items 1 to 11, respectively, 11 indicators (harmful substances and compounds), which characterize the quality of the air in the ground layer. They are: suspended particulate matter, particulate matter, sulfur dioxide, nitrogen dioxide and/or nitrogen oxides, carbon monoxide, ozone, lead (aerosol), benzene, polycyclic aromatic hydrocarbons, heavy metals - cadmium, nickel and mercury, and arsenic. It should also be pointed out that the MEW is empowered on its own initiative or at the suggestion of the Minister of Health (MH) or of the municipal authorities to determine additional indicators for the quality of the atmospheric air in the ground layer for individual regions of the country taking into account the nature sources of pollution and health risk (art. 4, par. 2). There are 4 types of limit values for the air quality in the urban and non-urbanized areas, namely: a) limit values for harmful substances (pollutants) in the ambient air and the measured concentrations for the separate indices, defined as mass, contained in one cubic meter of air under normal conditions per a definite time (art. 4, par. 3); b) limit values for disposals of harmful substances (pollutants) from the air, defined as mass per square meter of open surface per a definite time (art. 5); c) "alarm thresholds" through limited concentrations of harmful substances (pollutants) in the ambient air of the indicators in accordance with art. 4, par. 1 and 2, for prevention of health risks for the population in separate regions, under meteorological conditions and other factors, leading to temporary but considerable aggravation of the quality of the air (art. 7, par. 1); d) norms for the content of lead, sulphur and other harmful substances (pollutants) in the liquid fuels (art. 8, par. 1). The first 3 kinds of the abovementioned limit values are adopted by the MEW and MH, and the last 4th one – by the Council of Ministers (CM). There are 2 definitions of legal terms in the Additional provisions (AP) of this act which can be shown in relation to the abovementioned legal measure. They are, as follows: "Harmful substance (pollutant)" is each substance introduced directly or indirectly by man in the ambient air which is in position to exert harmful impact over the health of the population and/or the environment" (par. 1, point 2); "Quality of the ambient air", the open air in troposphere except the air at the working places is a co-ordination of the specified by the composition and the relationship between its natural ingredients and the added substances of natural or anthropogenic origin" (par. 1, point 3).

- Special rules on reduction of the emissions from immobile sources of pollution (art. 9 - 11).

These rules include: a) establishing of emission limit values for harmful substances (pollutants) released into the air from specific sites or activities - a fixed source of pollution by the MEW jointly with "concerned interested ministers" (art. 9, par. 1); b) legal possibility for the MEW to approve stricter emission limit values for certain sites and activities in certain municipalities, regions or settlements (art. 9, par. 4); c) working out by MEW, jointly with concerned interested ministers and adoption by the CM of "programs for gradual reduction of the total annual emissions of certain harmful substances (pollutants)", released into the air from certain sites or activities (e.g. large combustion installations, etc.) (art. 10a, par. 1); d) ban on the production of charcoal by open means (art. 11, par. 5). For the implementation of this legal measure, it is necessary to be taken into account the definition of the legal term "emission" according to par. 1, point 8 of the AP of the act where it is stated that: "Emission" is the discharge of harmful substances (pollutants) in the ambient air. The point or the surface from

which the discharge is implemented shall be called source. The emission shall be determined as mass of certain substance for one cubic meter discharged gas or as discharge of the emitted substance (emission discharge) at normal conditions”.

- Special rules, related to reduction of the emissions from mobile sources of pollution (art. 11a - 14).

Some of them are: a) competence of the CM to regulate the emission of volatile organic compounds (VOCs) in the use of organic solvents in certain paints, varnishes and reprocessing products in order to prevent and reduce air pollution (art. 11a, par. 1 and 2); b) permitting regime for the placing on the market of limited quantities of certain paints, varnishes and reprocessing products not complying with the VOCs limit values - for the purposes of restoration and maintenance of cultural monuments, under which the permit is issued by the MEW or a person empowered by him (art. 11a, par. 3 to 8); c) limited enumeration of harmful substances and compounds in the exhaust gases of internal combustion engines for the purposes of the adoption of limit values for quality of the air, i.e. smokiness and contents of carbon dioxide, nitrogen oxides and hydrocarbons (art. 12); d) competence of the Minister of Transport, Information Technologies and Communications (MTITC), together with the MEW and the MH, to approve emission standards for pollutants in the exhaust gases of motor vehicles (art. 13, par. 1).

- Special rules on the design, construction and operation of objects with sources of emissions in the air (art. 16 - 18).

They include: a) competence to the MEW with ordinance to regulate measures for implementation of Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer (OJ L 286, 31.10.2009), as well as competence of the MEW jointly with the Minister of Interior (MI) to regulate measures for implementation of Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006 (OJ L 150, 20.05.2014) (art. 17); b) obligation for legal and natural persons carrying out activities with emission sources in the air to carry out their own monitoring of these emissions (art. 18, item 1); c) specific requirements for trade in liquid fuels in relation to the quantity of certain harmful substances (pollutants) in them (art. 18a and 18b).

- Special rules related to the management and control on the activities influenced to the quality of the air (art. 19 and 24).

They concern the competencies of the MEW, the Regional Inspectorates of Environment and Waters (RIEW) at the MEW, the MI, the MTITC and the municipalities on the protection of the air from pollution.

- Special rules on the monitoring for the quality of the air (art. 20 – 22 and 25).

In principle, it is implemented by the MEW (art. 20, par. 1), but the legislator has provided the legal opportunity for the municipalities, in coordination with the MEW, to build their own air monitoring systems (art. 20, par. 2). On the other hand, the monitoring of trans-border transfer of pollutants, of the background quality of the ambient air, as well as of the influence of the pollution of the ambient air on the global processes in the atmosphere is carried out by the MEW and by the National Institute on Meteorology and Hydrology at the Bulgarian Academy of Sciences (art. 22, par. 1). According to data from the specialized environmental literature, monitoring of atmospheric air in Bulgaria is carried out through 85 stations and 6 mobile automatic stations within the scope of the National Environmental Monitoring System and 74

measuring stations located in 38 settlements¹⁶. However, according to data of the EEA to MEW, in 2015 within the National Automated System for Control of Ambient Air Quality in Bulgaria there were 50 stationary stations and in 34 settlements there were located points for monitoring the quality of this natural resource¹⁷.

- Special rules related to the information on the state of the air (art. 23).
The competent body in keeping of this information is MEW.
- Working out of an "Operational Action Plan" in the case of "unfavorable weather conditions and other factors" endangering the health of the population and posing the risk of exceeding the "established norms or alarm thresholds" (art. 30, par. 1). It shall be worked out by the municipality in coordination with the relevant RIEW and its implementation shall be done, if necessary, by an act of the mayor of the municipality (art. 30, par. 3).
- Special rules related to the control on the quality and the trade with liquid fuels (art. 30a – 30c and 30e – 30l).

The supervisory bodies in this field are the State Agency for Metrology and Technical Surveillance to the Minister of Economy, the Executive Agency "Maritime Administration" at the MTITC, the Customs Agency to the Minister of Finance and the National Statistical Institute (Article 30a).

- Implementation of compulsory administrative measures (art. 26 – 29, 30d and 33a – 33d).

Some of their forms are: a) giving mandatory written instructions from the control bodies (art. 26); b) approval of "programs for reduction of pollutant levels and for reaching the approved limit values under art. 6 in the prescribed deadlines "which are mandatory for implementation" in cases when in certain region the total mass of the emissions leads to exceeding of the limit values for harmful substances (pollutants) in the air and of the limit values for depositing (i.e. for the deposition on surface of the earth from the air) (art. 27, par. 1)¹⁸; c) limiting or stopping of production or other activities in cases of air pollution over admissible limit values (art. 28, par. 1, item 1)¹⁹. For the implementation of this kind of measures it is necessary to be taken into account the definition of the legal term "pollution of the ambient air" according to par. 1, point 1 of the AP of the act where it is stated that: "Pollution of the ambient air" is any entry of harmful substances (pollutants) into the air".

3.2. *Legal measures under some other laws*

Hereinafter below, some legal measures will be shown under some laws which have subsidiary implementation in this field.

3.2.1. Legal measures under CCRA, 2014

- Special rules related to the policy on climate change reduction (art. 3 - 10).

They mainly are connected with the competence of the CM to adopt National action plan on climate change and National strategy on key measures for adaptation to the consequences from the climate change (art. 8, para. 3 and art. 9, par. 3).

- Special rules related to the implementation of the obligations of Bulgaria under international treaties on the protection of air from pollution (art. 11 - 29).
- Special rules on the implementation of the European Scheme for trade with emissions and other EU law requirements on protection of the air from pollution (art. 30 - 70).

¹⁶ See *Национална стратегия по околна среда и План за действие 2000 - 2006 г.*, с. 72.

¹⁷ See *Национален доклад за състоянието и опазването на околната среда. [2015 г.]*, с. 9.

¹⁸ The competent authority is the respective municipality.

¹⁹ The competent authorities are MEW, RIEW and the respective municipality.

3.2.2. Legal measures under CDSEBA, 2012

- Special rules on the conditions and procedure for granting permits for exploration of storage sites and permits for the storage of carbon dioxide in the bowels of the earth (art. 9 - 57).

The competent authority for granting permits in this field is Minister of Energy (art. 9).

- Special rules related to obligations on the exploitation, closure and during the period after the closure of the carbon dioxide storage site in the bowels of the earth (art. 58 - 78).
- Special rules on the third party access to transmission networks and storage sites of carbon dioxide in the bowels of the earth (art. 79).

3.2.3. Legal measures under EPA, 2002

- General rules on the protection of the air from pollution (art. 55 and 56).

They include more general obligations of natural persons, including owners of motor vehicles and legal persons to prevent air pollution over limit values.

- Granting of complex permits for the construction and operation of new and the operation of existing installations and facilities for the categories of industrial activities under Annex 4 to the Act (art. 117 - 129).

The permits are granted from the EEA to the MEW (art. 120, par. 1), but the control on its implementation is carried out by the respective RIEW to the MEW (art. 120, par. 5).

- Environmental assessment (art. 81 - 91).
- Environmental impact assessment (art. 81 – 83 and art. 92 - 102).
- Right to information of the environment (art. 17 - 31).
- General rules on the National Environmental Monitoring System (art. 143 - 147).

This system is managed by the MEW, with exception for its environmental noise monitoring component, which is managed by the MH.

- Working out of environmental strategies and programmes (art. 75 - 80).
- Competence of the CM to adopt an ordinance on the order and the way of organizing the national inventories of harmful substances in the air according to the requirements of the Convention on Long-range Transboundary Air Pollution (Geneva, 13.11.1979) (art. 131k, item 5).

4. *Liability for infringement of the legislation on protection of the air from pollution*

Hereinafter below will be shown in brief the separate kinds of liability in this field.

4.1. *Administrative liability*

It is regulated in art. 34 – 44 of AAQA, 1996. These provisions contain a lot of *corpus delicti* of administrative offences of the requirements of this act.

4.2. *Civil Liability*

This liability is in the kind of tort liability, regulated in art. 170 – 172 of the EPA, 2002 and art. 46 – 54 of the Obligations and Contracts Act, 1950 (SG, No. 175 of 1950).

4.3. *Penal Liability*

It is regulated in PC, 1968, and especially in art. 352 (significant air pollution over limit values), art. 353, par. 1 – 3 (putting into operation of a plant or thermal power plant before putting into operation its purifying facilities), art. 353a (misrepresentation or announcement of incorrect information on the state of the environment, including the

air), and art. 353f (illegal production, use, distribution, import and export of ozone-depleting substances)²⁰.

5. Multilateral treaties on protection of the air from pollution with the participation of the Republic of Bulgaria

The Republic of Bulgaria is a contracting party to some multilateral treaties in the examined field. They will only be enumerated below, as follows:

- Convention on Long-range Transboundary Air Pollution (Geneva, 1979)²¹;
- Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) (Geneva, 1984)²²;
- Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent (Helsinki, 1985)²³;
- Protocol to the 1979 Convention on Long-range Transboundary Air Pollution concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes (Sofia, 1988)²⁴;
- Protocol to the 1979 Convention on Long-range Transboundary Air Pollution concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes (Geneva, 1991)²⁵;
- Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Further Reduction of Sulphur Emissions (Oslo, 1994)²⁶;
- Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Heavy Metals (Aarhus, 1998)²⁷;
- Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Persistent Organic Pollutants (Aarhus, 1998)²⁸;
- Protocol to the 1979 Convention on Long-range Transboundary Air Pollution to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg, 1999)²⁹;
- Vienna Convention for the Protection of the Ozone Layer (Vienna, 1985)³⁰;

²⁰ For more details on legal framework of the protection of the air from pollution in Bulgaria, see Божанов, С., *Законодателна уредба в областта на околната среда*, София: Арго Пъблишинг, 2006, с. 167 – 171; Наумова, С., *Основни въпроси на екологичното право*, 2. прераб. и доп. изд., София: БАН-ИДП, 2012, с. 192 – 196; Пенчев, Г., *Екологично право. Специална част*, с. 23 – 47 и цитираната там литература; Стоянов, С., Е. Терлемезян, *Българско и международно право за екологичен мениджмънт на пристанищни райони*, в: *Екологичен мениджмънт на пристанищни райони. Повишаване на квалификацията на пристанищните власти и всички заинтересовани представители на обществото в България*, Б.м.: Фламандско-български проект BUL/017/02, 2004, с. 56 – 57.

²¹ Into force for Bulgaria since March 16, 1983.

²² Into force for Bulgaria since January 28, 1988.

²³ Into force for Bulgaria since September 2, 1987.

²⁴ Into force for Bulgaria since February 14, 1991.

²⁵ Into force for Bulgaria since May 28, 1998.

²⁶ Into force for Bulgaria since October 3, 2005.

²⁷ Into force for Bulgaria since January 26, 2004.

²⁸ Into force for Bulgaria since October 23, 2003.

²⁹ Into force for Bulgaria since October 3, 2005.

³⁰ Into force for Bulgaria since February 18, 1991.

- Montreal protocol on Substances that Deplete the Ozone Layer (Montreal, 1987)³¹;
- Amendment to the Montreal protocol on Substances that Deplete the Ozone Layer (London, 1990)³²;
- Amendment to the Montreal protocol on Substances that Deplete the Ozone Layer (Copenhagen, 1992)³³;
- Amendment to the Montreal protocol on Substances that Deplete the Ozone Layer (Montreal, 1997)³⁴;
- Amendment to the Montreal protocol on Substances that Deplete the Ozone Layer (Beijing, 1999)³⁵;
- Amendment to the Montreal protocol on Substances that Deplete the Ozone Layer (Kigali-Rwanda, 2016)³⁶;
- United Nations Framework Convention on Climate Change (New York, 1992)³⁷;
- Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto, 1987)³⁸;
- Doha Amendment to the Kyoto Protocol to the United Nations Framework Convention on Climate Change (Doha-Qatar, 2012)³⁹;
- Paris Agreement to the United Nations Framework Convention on Climate Change (Paris, 2015)⁴⁰.
- United Nations Convention on the Law of the Sea (Montego Bay, 1982)⁴¹.

In relation to these treaties, it should be pointed out that under art. 5, par. 4 of the Constitution of the Republic of Bulgaria (SG, No. 56 of 1991, as amended), the international agreements which are ratified and entered into force for Bulgaria are part of the domestic legislation with priority to contradicting national regulations⁴².

6. Conclusions

³¹ Into force for Bulgaria since February 18, 1991.

³² Into force for Bulgaria since July 27, 1999.

³³ Into force for Bulgaria since July 27, 1999.

³⁴ Into force for Bulgaria since November 10, 1999.

³⁵ Into force for Bulgaria since April 15, 2002.

³⁶ It is ratified by Bulgaria with an Act of 28.02.2018 (SG, No. 22 of 2018).

³⁷ Into force for Bulgaria since August 10, 1995.

³⁸ Into force for Bulgaria since February 16, 2005.

³⁹ It is ratified by Bulgaria with an Act of 23.07.2015 (SG, No. 60 of 2015).

⁴⁰ Into force for Bulgaria since December 29, 2016.

⁴¹ This convention has general meaning for the protection of the marine environment from different sources of pollution, including atmospheric pollution, that is why, it has indirect meaning for the protection of the air from pollution. See in the examined field following articles of this convention: a) art. 212 on the obligation of the states, contracting parties, to take the necessary measures for prevention, reduction and control over the atmospheric pollution for the purposes of prevention of the marine environment from pollution from or through the atmosphere; b) art. 222 on the obligation of these countries to enforce within their air space or with regard to flag state or registered ships or aircraft the laws and regulations they adopt, including applicable international rules and standards.

⁴² On the protection of the air from pollution under international environmental law, see for example Божанов, С., *Международноправни актове в областта на околната среда*, Русе: Печатна база при Русенския университет "Ангел Кънчев", 2004, с. 144 – 192; *Световният екологичен проблем*, с. 237 – 244; Kiss, A., D. Shelton, *International environmental law*, pp. 231 – 237; Kiss, A., D. Shelton, *Manual of European environmental law*, pp. 342 – 346, 349 - 350; Shelton, D., A. Kiss, *Judicial Handbook on Environmental Law*, pp. 81 – 85; Yamineva, Y., S. Romppanen, Is Law Failing to address air pollution? Reflections on International and EU developments, in: *Review of European, Comparative & International Environmental Law*, Hoboken (New Jersey), 2017, Vol. 26, Issue 3, pp. 189 – 200.

Finally, some general conclusions and recommendations are given from the examined regulation.

- The efficient implementation of the Bulgarian legislation on protection of the air from pollution will contribute to successful solving of complicated environmental problems on a national, regional and world-wide scale.
- The examined legal regulation has a many ecological aspects, that is why, the successful implementation of the legislation in this field requires efficient collaboration between scientists and practical experts from different branches of sciences and social practice.
- The observance of the legislation on protection of the air from pollution is related to considerable financial resources, that is why, there is a need to be used different possibilities on a national, EU and UN levels for financing of activities which cause impact on the state of this natural resource.

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