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## FILLING THE GAP IN THE EU AIR QUALITY LEGISLATION:

## The Medium Combustion Plants Directive

Samvel Varvastian

#### The Medium Combustion Plants Directive: An Overview

The 2015 *Medium Combustion Plants Directive* (MCPD)<sup>1</sup> was initially a part of the clean air legislation package initiated by the European Commission in order to achieve the short-term and long-term EU air quality objectives.<sup>2</sup> The need for adopting the Directive was obvious: the MCPs increasingly contributed to air pollution,<sup>3</sup> but emissions from them were not regulated at the EU level,<sup>4</sup> even despite the fact that regulation of emissions from small and large combustion plants has already been present for a few years.<sup>5</sup> Thus, the combustion of fuel in certain small combustion plants and appliances is covered by implementing measures as referred to in Directive 2009/125/EC,<sup>6</sup> although further measures are urgently needed under this act in order to cover the remaining regulatory gap.<sup>7</sup> Meanwhile, combustion of fuel in large combustion plants is covered by Directive 2010/75/EU,<sup>8</sup> which repealed the previous Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants.

The new MCPD addresses the control of emissions of sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and dust into the air as well as the monitoring of carbon monoxide (CO)

<sup>&</sup>lt;sup>1</sup> Directive (EU) 2015/2193 of the European Parliament and of the Council of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants (OJ L 313, 28.11.2015, p. 1).

<sup>&</sup>lt;sup>2</sup> For an assessment of the latter see Samvel Varvaštian, Achieving the EU Air Policy Objectives in Due Time: A Reality or a Hoax?, (2015) 24(1) European Energy and Environmental Law Review 2-11.

<sup>&</sup>lt;sup>3</sup> MCPs are widely used for electricity generation, domestic and residential heating and cooling, providing heat and steam for industrial processes, etc., and substantially contribute to emissions of various air pollutants. The estimated number of such plants in the EU is around 143 000. See http://ec.europa.eu/environment/industry/stationary/mcp.htm.

<sup>&</sup>lt;sup>4</sup> See MCPD, recital 4.

<sup>&</sup>lt;sup>5</sup> Ibid., recital 5.

<sup>&</sup>lt;sup>6</sup> Ibid. Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (OJ L 285, 31.10.2009, p. 10)

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Ibid. Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17).

emissions.<sup>9</sup> The scope of the Directive is restricted to MCPs only – that is, to combustion plants with a rated thermal input equal to or greater than 1 MW and less than 50 MW (irrespective of the type of used fuel)<sup>10</sup> and to combinations formed by two or more new MCPs if their emissions are, or could be, discharged through a common stack.<sup>11</sup> The Directive does not cover a range of combustion plants and other similar facilities, including plants in which the gaseous products of combustion are used for the direct heating, drying or any other treatment of objects or materials, technical apparatuses used in the propulsion of vehicles, ships or aircraft, gas turbines and gas and diesel engines, when used on offshore platforms, reactors used in the chemical industry, coke battery furnaces, etc.<sup>12</sup>

The Directive envisages a Member States-based permit and registration system for the MCPs to operate.<sup>13</sup> Accordingly, it requires from the Member States to ensure that as of 1 January 2024, no existing MCP with a rated thermal input greater than 5 MW is operated without a permit or without being registered, while for MCPs with a rated thermal input of less than or equal to 5 MW this deadline is extended to 1 January 2029.<sup>14</sup> The procedure for granting a permit or for registration is thus to be specified at Member States' level. The general requirement is that the operator should inform the relevant national authority of the operation of an MCP, or its intention. They must also provide specified minimum information on the MCP listed in Annex I of the MCPD, including its rated thermal input, type (diesel engine, gas turbine, dual fuel engine, etc.), type and share of fuels used (solid biomass, gas oil, natural gas, etc.), expected number of annual operating hours and average load in use, etc.<sup>15</sup>

The cornerstone of the MCPD is the setting of emission limit values (mg/Nm<sup>3</sup>) for SO<sub>2</sub>, NO<sub>x</sub> and dust. In setting these values, the Directive distinguishes between the existing MCPs and new MCPs.<sup>16</sup> The emission limit values for the latter are generally stricter, although a certain number of exemptions and exceptions are allowed.<sup>17</sup> Furthermore, the Directive sets different emission limit values for both existing and new MCPs with differently rated thermal input – for example, plants with a rated thermal input from 1 to 5 MW, greater

 $^{15}\,$  Art. 5(3) and Annex I.

<sup>&</sup>lt;sup>9</sup> Art. 1.

<sup>&</sup>lt;sup>10</sup> Art. 2(1).

<sup>&</sup>lt;sup>11</sup> Arts 2(2) and 4.

<sup>&</sup>lt;sup>12</sup> Art. 2(3).

<sup>&</sup>lt;sup>13</sup> Art. 5.

<sup>&</sup>lt;sup>14</sup> Art. 5(2).

<sup>&</sup>lt;sup>16</sup> Existing MCPs are those put into operation before 20 December 2018 or for which a permit was granted before 19 December 2017 pursuant to national legislation provided that the plant is put into operation no later than 20 December 2018. New MCPs are those that do not fall within this category. See Arts 3 and 6.

<sup>&</sup>lt;sup>17</sup> See, in general, Annex II.

than 5 MW, etc.<sup>18</sup> Also, the Directive separately sets emission limit values for new and existing engines and gas turbines.<sup>19</sup>

Notably, the above-mentioned requirements are subject to multiple exemptions and exceptions<sup>20</sup> for example, in case of limited MCP operating hours, weather conditions in case of MCPs used for heat production, MCPs linked to a national gas transmission system or firing solid biomass as the main fuel, etc.<sup>21</sup> However, there is also a possibility for Member States to apply stricter emission limit values than those set out in the Directive for individual MCPs within zones or parts of zones not complying with the air quality limit values laid down in the *Ambient Air Quality Directive* (AAQD).<sup>22,23</sup> Such measures may thus be a part of the development of air quality plans referred to in Art. 23 of the AAQD,<sup>24</sup> taking into account the results of the information exchange between the European Commission, the Member States, the industry and NGOs<sup>25</sup> and provided that applying the stricter emission limit values would effectively contribute to a noticeable improvement of air quality.<sup>26</sup>

Apart from setting the emission limit values, the MCPD also provides a list of obligations of the operators.<sup>27</sup> These mainly include the monitoring of SO<sub>2</sub>, NO<sub>x</sub>, dust and CO emissions by means of periodic measurements and recording and processing the monitoring results as well as keeping other relevant information, for example, a record of operating hours, type and quantities of fuel used, the events of non-compliance, etc.<sup>28</sup> The operator is obliged to make such information available to the competent authority upon request; such a request might be made as the implementation of the public's right of access

<sup>&</sup>lt;sup>18</sup> Ibid.

<sup>&</sup>lt;sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> See Art. 6 and Annex II.

 $<sup>^{21}</sup>$  lbid.

<sup>&</sup>lt;sup>22</sup> Art. 6(9).

<sup>&</sup>lt;sup>23</sup> 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 (OJ L 152, 11.6.2008, p. 1). The Directive serves as one of the major EU air policy pillars, laying down measures aimed at establishing objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment, assessing the ambient air quality in Member States, ensuring that information on ambient air quality is made available to the public, maintaining air quality where it is good and improving it in other cases, etc. (Art. 1). For more on AAQD see David Langlet and Said Mahmoudi, *EU Environmental Law and Policy*, Oxford University Press, 2016, at 212-215.

<sup>&</sup>lt;sup>24</sup> Under Art. 23(1) of the AAQD, the Member States must establish the air quality plans when the levels of pollutants in ambient air exceed the respective values. Such plans may include measures in relation to motor-vehicle traffic, construction works, ships at berth, and the use of industrial plants or products and domestic heating (Art. 24(2)).

<sup>&</sup>lt;sup>25</sup> Namely, information on the emission levels achievable with best available and emerging technologies and the related costs (Art. 6(10) of the MCPD).

<sup>&</sup>lt;sup>26</sup> Art. 6(9).

<sup>&</sup>lt;sup>27</sup> Art. 7.

 $<sup>^{28}</sup>$  Arts 7(1), (3) and (5) and Annex III.

to information.29

Finally, in case of non-compliance with the emission limit values provided, the operator is required to take the measures necessary to ensure that compliance is restored within the shortest possible time.<sup>30</sup> However, it is ultimately up to Member States to ensure the effective compliance check system, including any such requirements for the operator.<sup>31</sup> Thus, if non-compliance causes a significant degradation of local air quality, the Member States should ensure that operation of the MCP shall be suspended until compliance is restored.<sup>32</sup>

#### Commentary

Although the Directive does fill the gap in the EU air quality legislation, it is unclear how significant an impact it will have. After all, air quality standards appeared quite some time ago in the EU legislation and have evolved ever since; however, despite all of the progress, the problem of air pollution in Europe has been far from resolved and it is still responsible for significant expenditure each year.<sup>33</sup> In that context, it is worth noting that even the major policy pillars, namely the AAQD, are not immune to some strong criticism due to their failure to address the issues at stake in a critical and comprehensive way.<sup>34</sup> Thus, for example, the same piece of legislation, enshrining the key requirements necessary for abating air pollution as recommended by the WHO, was excluded from the revision under the clean air legislation package, incorporating the above-mentioned MCPD and other initiatives.<sup>35</sup> This was because it was assumed that such a revision would not be appropriate at that particular point.<sup>36</sup> Once again, this may be a good reminder of the fragile balance of economic and environmental rights, which has so far seen many examples of prevalence of the former over the latter.<sup>37</sup> It can thus not be ruled out that there will most probably be some potential pitfalls in the way of MCPD as well, which may call into question its overall resilience and

<sup>&</sup>lt;sup>29</sup> Art. 7(6).

<sup>&</sup>lt;sup>30</sup> Art. 7(7).

<sup>&</sup>lt;sup>31</sup> Art. 8.

<sup>&</sup>lt;sup>32</sup> Art. 8(3).

<sup>&</sup>lt;sup>33</sup> See Varvaštian above (n 2), at 2-3.

<sup>&</sup>lt;sup>34</sup> For a critical view on this see, for example, Bert Brunekreef et al., *Clean air in Europe: beyond the horizon?*, (2015) 45(1) European Respiratory Journal 7-10.

<sup>&</sup>lt;sup>35</sup> For more on this see Varvaštian above (n 2), at 10.

<sup>&</sup>lt;sup>36</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A Clean Air Programme for Europe. COM(2013) 918, at 4.

<sup>&</sup>lt;sup>37</sup> See, for example, the practice of European Court of Justice on Member States' compliance with AAQD and/or the preceding legislation on air quality: *Commission v. Italy* (C-68/11, EU:C:2012:815, para. 59); *ClientEarth* (C-404/13, EU:C:2014:2382, para. 20). See also the Opinion of AG Kokott in case *Commission v. Bulgaria* (C-488/15, ECLI:EU:C:2016:862, para. 69).

efficiency, even despite the initial positive expectations.<sup>38</sup> These are, however, concerns for the future; for now, the Directive's gap-filling addressing of emissions at source is certainly a most timely and laudable move.

The Directive's adoption however followed major events in global policy, which have, or at least may have major consequences for environmental protection in general. For instance, it coincided with a historical 21<sup>st</sup> Conference of Parties to the United Nations Framework Convention on Climate Change, which resulted in the adoption of the first global climate deal – the *Paris Agreement*.<sup>39</sup> And just few months prior to the adoption of the MCPD, the US Environmental Protection Agency finalized its rules to reduce emissions from fossil fuel-fired power plants – the *Clean Power Plan*.<sup>40</sup> It thus seemed that 2015 ended on a high note in terms of global environmental protection.

The year 2016, on the other hand, has proven to be quite different. For one, in June, the "Brexit" referendum took place in the UK, resulting in the first case of an EU Member State opting to leave the Union. Accordingly, concerns have already been expressed about the potential trajectory of the future environmental policy.<sup>41</sup> These concerns may be multiplied, as similar referendums might be initiated in other EU Member States in the coming years.<sup>42</sup> Should these follow the UK scenario, this could open a question as to whether the vitality of the EU order including, of course, its environmental policy, can be successfully carried into the next decade. Since the EU has many times proven to be a flagship in the promotion of global and ambitious environmental goals,<sup>43</sup> any grand-scale

<sup>&</sup>lt;sup>38</sup> Interestingly, in its description of the MCPD, the European Commission seems to pay particular heed to the underlying economic factors: "[the Directive] has been designed to be affordable for SMEs, and provides long-term certainty for all economic operators concerned whilst minimising the administrative burden for both industry and Member States. In addition, beyond being environmentally efficient, [it] will encourage continued innovation and help EU industry gaining shares of the rapidly growing global market of pollution control technology" (see above (n 3)).

<sup>&</sup>lt;sup>39</sup> Paris Agreement under the United Nations Framework Convention on Climate Change, CFCCC/CP/2015/L.9/Rev.1.

<sup>&</sup>lt;sup>40</sup> On the Clean Power Plan see, for example, Tomás Carbonell, EPA's Proposed Clean Power Plan: Protecting Climate and Public Health by Reducing Carbon Pollution from the US Power Sector, (2014) 33 Yale Law & Policy Review 403-426; Vicki Arroyo et al., State Innovation on Climate Change: Reducing Emissions from Key Sectors While Preparing for a New Normal, (2016) 10 Harvard Law & Policy Review 385-430.

<sup>&</sup>lt;sup>41</sup> See, for example, Colin T. Reid, *Brexit and the future of UK environmental law*, (2016) 34(4) Journal of Energy & Natural Resources Law 407-415.

<sup>&</sup>lt;sup>42</sup> Kate Lyons and Gordon Darroch, *Frexit, Nexit or Oexit? Who will be next to leave the EU*, The Guardian, 27 June 2016, https://www.theguardian.com/politics/2016/jun/27/frexit-nexit-or-oexit-who-will-be-next-to-leave-the-eu.

<sup>&</sup>lt;sup>43</sup> See, for example, Christina Eckes, Environmental Policy outside-in: How the EU's Engagement with International Environmental Law Curtails National Autonomy, (2012) 13(11) German Law Journal 1151-1175 and Elaine Fahey, The EU Emissions Trading Scheme and the Court of Justice: The High Politics of Indirectly Promoting Global Standards, (2012) 13(11) German Law Journal 1247-1267.

crisis within its order may have strong repercussions on environmental policies throughout the world. This is particularly worrisome as governments in other major political powers may actually opt for a lax approach in their environmental regulation. Thus, a fair example of the vulnerable situation in which the contemporary environmental law has found itself is the US, where President Donald Trump, who openly denied climate change, vowed to withdraw the US from the Paris Agreement, which had been entered into under the administration of his predecessor Barack Obama.<sup>44</sup>

To sum up these seemingly far-reaching reflections, it could be acknowledged, somewhat grimly, that despite its progress, environmental law – including that established in the EU – once again finds itself on the verge of uncertainty. And yet, this happens against a backdrop of some very worrisome data on global environmental and, accordingly, health threats that are unanimously predicted to exacerbate in the future.<sup>45</sup> Should the slow-moving train of environmental policy slacken its pace further, let alone stop, or even turn back, there is no telling how much more inhospitable will the planet become for the present and future generations in the decades to come than we currently believe.

<sup>&</sup>lt;sup>44</sup> Steven Mufson and Brady Dennis, *Trump victory reverses U.S. energy and environmental priorities*, The Washington Post, 9 November 2016, https://www.washingtonpost.com/news/energy-environment/wp/2016/11/09/trump-victory-reverses-u-s-energy-and-environmental-priorities/?utm\_term=.12faa8c68929.

<sup>&</sup>lt;sup>45</sup> See, for example, the projections of climate change and its impact drawn by the Intergovernmental Panel on Climate Change. IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp., at 56-74.