

## Air Pollution (Monitoring and Control) Bill Explanatory Notes

1. These Explanatory Notes explain what each part of the Act will mean in practice; provide background information on the development of policy; and provide additional information on how the Act will affect existing legislation in this area.
2. These Explanatory Notes are best read alongside the Act. They are not intended to be a comprehensive analysis of the Act.

### Summary

The Bill sets up a framework for the UK to achieve its goals of reducing the health impacts of air pollution from controllable sources. Its main elements are as follows:

- **Maintaining air quality standards following the UK's departure from the European Union.** The Bill commits the Secretary of State to ensuring that the United Kingdom's regulations and standards regarding air quality are at least as stringent as existing European Union standards on air quality levels and monitoring at the time of the United Kingdom's departure.
- **Establishing a high resolution air pollution monitoring network.** The Bill requires the Secretary of State to install a network of certified, high resolution air quality monitors across the country. The Bill sets out what types of sites the network must cover, criteria for sampling points, and requirements for collection, management, and publication of data. It sets out the requirement for the consultation of local authorities before placement of sampling sites.
- **Establishment of registers and air quality information.** The Bill establishes a requirement that the Secretary of State publish a register of past pollutants, controllable sources, and clean alternative technologies, updated yearly. The Secretary of State is required to take the necessary steps to make the register available to the public. If clean alternative technologies do not exist the Bill introduces a duty to report on actions taken to bring them to market.
- **Setting emissions reduction targets for air pollutants.** The Bill lays out requirements for the Secretary of State to set targets for reducing levels of air pollution, including a date before 2030 when emissions of pollutants from controllable sources will be eliminated, and the achievement of ambient pollution levels below World Health Organisation guidelines by 2030 at the latest. Targets must be aimed at maximising reductions in impacts of air pollution on human health.
- **Gathering and sharing data on air quality.** The Bill requires that the Secretary of State establish an open access air quality portal containing the data from all networks of reference-grade local and national data, the data from the low-cost monitoring network established by this Bill, and the registers and information on air quality set up in section 3. It sets out requirements for how the data must be published including a requirement to provide air quality forecasts.

- **Obtaining independent advice.** The Bill establishes the Committee on Air Pollution and Health (“the Committee”), consisting of persons appointed by the Secretary of State, which has a duty to provide independent advice to the Secretary of State with regard to achieving the goals of this Part. The Secretary of State is required to obtain and publish advice from the Committee on how to achieve the goals of this Bill, with explanation given where the Secretary of State does not follow this advice. The Bill sets out the breadth of this advice, and the areas of expertise and experience that this Committee must encompass.
- **Reporting requirements.** The Bill provides for two systems of annual reporting by the Government on the UK’s air quality. It requires that the Secretary of State publish a report on the proposals and policies for meeting targets set out as a result of this Bill, and sets out the requirements for this report. It also requires that the Secretary of State lay a report annually before Parliament on the progress made towards targets, and specifies the minimum areas that the report must cover. It requires the Secretary of State to obtain independent advice regarding annual reporting, and what further indicators should be reported upon.

## Background

- Air pollution in the United Kingdom is acknowledged as a serious threat to human health. The health impacts of air pollution are particularly dangerous to vulnerable groups such as children, the elderly, and those with respiratory illnesses.
- The UK has been found to be in breach of European air quality regulations.
- In January 2019 the Clean Air Strategy was published, which seeks to reduce air pollution across the UK, and acknowledges air pollution as the largest environmental health risk in the UK.
- Following the UK’s departure from the European Union, limit values and targets from EU directives will be translated into domestic law via the European Union (Withdrawal) Act 2018, after which they can be easily amended as secondary legislation.
- Between 28,000 and 36,000 deaths a year are attributed by Public Health England to long-term exposure to air pollution.
- The Government has declared its intention to set a limit of 10 µg/m<sup>3</sup> annual mean particulate matter (PM) 2.5, in line with World Health Organisation (WHO) guidelines.
- Air quality can vary significantly over short distances and over time, creating “hotspots” where pollution is exacerbated and periods when high levels are sustained.
- Some pollutants, such as PM 2.5, can be caused by factors beyond human or sovereign control, but this should not be an excuse for inaction.

- Policy measures to reduce air pollution from controllable sources will be necessary in order to effect the pollution reduction requirements set out in this Bill whilst avoiding any regressive impacts on those less able to pay.

## The Act

### Clause 1: Principal aim

1. This section sets out the overarching goal of the Bill, requiring that the Secretary of State carry out his duties under this act with the principal aim of reducing pollutants from controllable sources, and that emissions of these pollutants are reduced in line with targets set under section 4 and eliminated by 2030.

### Clause 2: Establishment of high resolution air pollution monitoring network

1. This section requires the Secretary of State to set up a network of high resolution air pollution sampling points, with monitors in all areas of England, conforming to regulations.
2. *Subsection (1)* of this section imposes a duty on the Secretary of State to install a network of sampling points within 12 months of the passage of this Act, which must cover as a minimum:
  - Every postcode district,
  - Every urban school and hospital,
  - Any other location where the Secretary of State deems vulnerable populations, such as the elderly or very young, to be at risk of exposure to pollution, and
  - Any other location specified by the Secretary of State for the purpose of determining the most appropriate location of interventions, monitoring the impact of past or ongoing intervention, and / or monitoring sources of pollution for more accurate attribute.
3. *Subsection (2)* of this section requires the Secretary of State to consult local authorities in relation to the criteria for the network of sampling points, and enables local authorities to request the designation of a sampling location.
4. *Subsection (3)* of this section enables the Secretary of State to include already-installed sampling points in the high resolution air pollution monitoring network, provided that they satisfy subsection (4), to prevent the duplication of sampling points.
5. *Subsection (4)* of this section states that sampling points must meet certification criteria set out in regulations relating to the equipment used and the siting, must provide data readings averaged and published no less frequently than every hour, and assess levels of relevant pollutants (See Interpretation for the definition of 'relevant pollutant.')

6. *Subsection (5)* requires that the system of monitors be operated in a way that allows data to be collected in real time, and sets out requirements regarding how the data should be published:
  - *Subsection (5)(a)* requires that the data be published so that it is possible to disaggregate pollutants by source, and by whether or not they are controllable (See Interpretation for the definition of ‘controllable’);
  - *Subsection (5)(b)* requires that the data be published so that it is possible for local authorities and the Secretary of State to use the data to inform policies or trigger actions that will control the sources of the pollutants concerned;
  - *Subsection (5)(c)* requires that the data be published so that it is possible to compare the data from different sampling points so as to enable interventions to be prioritised and locations for reference grade monitoring to be identified.
7. *Subsection (6)* requires the Secretary of State to make provisions with regard to the setting up of monitoring where vulnerable populations are seen to be at risk within six months of the passage of the act, as well as any other criteria or decision in this section.
8. *Subsection (7)* requires the Secretary of State to seek independent advice from the Committee on regulations and decisions in this section, to ensure efficacy of the network with regard to the goal of the Act.
9. *Subsection (8)* specifies that the monitoring network established as a result of this section does not replace or prevent the maintenance of existing networks of reference-grade monitors.

### **Clause 3: Duty to maintain registers and information on air pollutants**

1. *Subsection (1)* requires the Secretary of State to prepare and publish, within 6 months of the passing of this Act, the following registers of the following: relevant pollutants (see Interpretation for definition of ‘relevant pollutants’); all known, controllable sources of each pollutant; technologies that in their opinion are clean alternative technologies (see Interpretation for definition of ‘clean alternative technologies’); sources of pollution for which no clean alternative technologies currently exist. The purpose of the register is to provide information about known sources of pollution and best available technologies for eliminating them. Where technologies do not yet exist the Bill also creates a policy making requirement to address these gaps, under Clause 7.
2. *Subsection (2)* requires that the registers referred to in subsection (1) be prepared or updated only with due consideration of independent advice obtained under section 6.
3. *Subsection (3)* requires the Secretary of State to take appropriate steps to ensure that the registers referred to in this section are available to the public.
4. *Subsection (4)* gives the Secretary of State the power to require that operators of sources of relevant pollutants provide pollutant data for the purposes of preparing the registers and projections referred to subsection (1). This extends to known sources and

facilities and operators that the Secretary of State reasonably considers to be a source of that pollutant.

#### **Clause 4: Duty to set targets**

This section requires the Secretary of State to establish targets for the elimination of controllable sources of pollution, with interim targets, and to ensure that ambient pollution levels are not only maintained but further reduced.

1. *Subsection (1)* requires the Secretary of State to set targets aimed at reducing air pollution from each relevant source within 12 months of passage of the Act. At a minimum, the Secretary of State shall do the following:
  - Under paragraph (a), the Secretary of State shall provide a target date by which emissions from pollutants from controllable sources will be eliminated, including pollutants covered by WHO guidelines, and this target date shall not be later than 2030.
  - Under paragraph (b), the Secretary of State must have interim targets as a way to demonstrate progress towards elimination of relevant pollutants from controllable sources.
2. *Subsection (2)* requires the following:
  - Under paragraph (a), the Secretary of State must ensure that ambient pollution levels of relevant pollutants fall below WHO guidelines on or before 2030.
  - Under paragraph (b), the Secretary of State must ensure that ambient levels of relevant pollutants remain or fall beneath the levels set by air quality regulations, standards and commitments in place at the point when the United Kingdom exits the European Union, so that there is no subsequent loss of protection of health.
3. *Subsection (3)* specifies that the targets set by the Secretary of State in this Part will maximise reduction of adverse impacts of relevant pollutants on human health – including reduction in cardiovascular and respiratory impacts directly correlated with relevant controllable pollutants.
4. *Subsection (4)* disallows the Secretary of State from setting targets per this section unless a draft of the statutory instrument laying out the targets has been laid before and approved by a resolution of each House of Parliament.

#### **Clause 5: Publication of open-access data**

1. This section sets out the duty for the Secretary of State to establish a portal that will provide open access to air quality data at a national and local level.
2. *Subsection (1)* requires the Secretary of State to establish an open-access ambient air quality portal that draws on national and local data from existing networks of reference-grade monitors and on the network of low-cost monitors set out in section 7.

3. *Subsection (2)* specifies that the portal must publish data online, in real-time, in such a way that at a minimum:
  - a. It is possible to disaggregate pollutants by source, and whether or not they are controllable (See Interpretation for the definition of 'controllable');
  - b. The public and in particular vulnerable populations can access and understand the information published on this portal, including forecasts on air pollutant levels and alerts regarding high pollution episodes (see Interpretation for the definition of 'vulnerable populations');
  - c. It is possible for local authorities and the Secretary of State to use the data to inform policies or trigger actions that will control the sources of the pollutants concerned.

#### **Clause 6: Duty to obtain independent advice**

1. This section establishes a new, independent advisory body to be known as the Committee on Air Pollution and Health (referred to as "the Committee"), which is required to provide independent advice to the Secretary of State on the matters set out in this Part, and specifies the areas on which the Secretary of State must consult the Committee to ensure that the objectives of this Act are met.
2. *Subsection (1)* establishes a new, independent body, the Committee on Air Pollution and Health, referred to as "the Committee".
3. *Subsection (2)* specifies that the duty of the Committee is to provide independent advice to the Secretary of State on matters that are raised by this Act.
4. *Subsection (3)* sets out a requirement that Secretary of State must consult the Committee, with advice obtained and made public within six months of the passage of the Act, regarding aspects of this Part, and sets out a list of the topics on which the Secretary of State must seek advice.
5. *Subsection (4)* states that the Secretary of State must endeavour to ensure that the advice as a whole reflects expert knowledge or experience of the certain areas, and gives a list of the areas of experience and knowledge that are desirable.
6. *Subsection (5)* states that prior to any amendments of the Act, the Secretary of State must seek independent advice on the implications of those proposed amendments.
7. *Subsection (6)* states that in the event the Secretary of State makes a decision that is contrary to the independent advice obtained, a full explanation of the rationale for this difference must be provided in the annual report referred to in clause 8.

#### **Clause 7: Duty to prepare proposals and policies to meet targets**

1. *Subsection (1)* sets out a duty for the Secretary of State to publish a report no later than six months after obtaining independent advice on the topics described in section 6 from the Committee. The report must set out proposals and policies for meeting the

- overarching objective set out in Section 1, as well as the targets laid out through section 4.
2. *Subsection (2)* describes in more detail the report, which must include, but is not limited to:
    - a. Paragraph (a) states the report must lay out the scope of the Secretary of State's current policies;
    - b. Paragraph (b) states the report must lay out the timeline by which the Secretary of State anticipates policies and proposals will take effect.
  3. *Subsection (3)* states the report must lay out in detail how proposals and policies set out in the report affect different sectors of the economy.
  4. *Subsection (4)* requires that the report state how proposals and policies will impact key health indicators known to be associated with pollutants listed in the register referred to in section 3.
  5. *Subsection (5)* requires the proposals and policies, viewed as a complete package, to complement and enhance existing climate policies. In no event shall these proposals and policies negatively impact achievement of existing climate policies or weaken existing climate policies.
  6. *Subsection (6)* requires the report include actions taken to bring new clean alternative technologies to market where they do not yet exist.

#### **Clause 8: Monitoring and reporting**

1. *Subsection (1)* sets out a duty for the Secretary of State to seek and take into consideration independent advice in relation to progress made in meeting the objective and targets. This advice must be included in a report laid before Parliament each year, beginning with the year 2021, that sets out the following:
  - a. Paragraph (a) sets out a list of the information that must be included, as a minimum, in the report as indicators of progress towards the objective and targets.
2. *Subsection (2)* requires the Secretary of State to obtain independent advice on those matters laid out in Subsection (1) of this section. In addition, it is noted that independent advisors may, but are not required to, specify additional indicators of progress toward the objective and targets that must be included in subsection (1)(a).