



Public Consultation on Solid Fuels,
Air Quality Division,
Department of Communications,
Climate Action & Environment,
Newtown Road,
Wexford,
Y35 AP90

1st April 2021

Re: Public consultation on the development of new solid fuel regulations for Ireland

Dear Sir/ Madam,

The Environmental Protection Agency (EPA) acknowledges and welcomes the opportunity to comment on the Department of the Environment, Climate and Communications, public consultation on the development of new solid fuel regulations for Ireland. The EPA has repeatedly commented on the impacts of the burning of solid fuels on human health and ecosystems and advocated for a strengthened regulatory framework with accompanying supports to allow a transition to cleaner home heating choices.

Human health -

Across Europe air pollution continues to be one of the biggest environmental threats to public health and ecosystems. From the EPA's most recent reports; *Ireland's Environment – An Integrated Assessment 2020*, *Air Quality in Ireland 2019*, and *Urban Environmental Indicators – Nitrogen Dioxide levels in Dublin* and the growing body of research into the environmental and public health effects of air pollution, it is clear that the current levels of air pollution in Ireland are negatively impacting on the health and the quality of life of the citizens of Ireland. Recent research into the public health effects of air pollution includes Irish studies on cardiovascular and respiratory disease, stroke and cognitive function.

There are clear opportunities to take action to reduce the level of pollutants in the atmosphere, as data produced by the EPA and research funded by Government via the EPA Research programme on the key sources of air pollutants clearly indicates. Such actions when progressed can provide a cleaner and healthier environment supporting a sustainable society and economy. The zero pollution objective in the EU Green deal sets out the direction of travel

for future reductions in air pollution in Europe. The EPA has strongly and repeatedly supported moving beyond statutory compliance with EU standards and moving towards World Health Organisation (WHO) guideline values which offer greater protection to public and environmental health.

Looking specifically at solid fuel usage in Ireland, the EPA notes that domestic solid fuel burning is the dominant source of fine particulate matter (PM_{2.5}). The most recent figures for premature deaths in Ireland due to poor air quality from the European Environment Agency (EEA) outline that 1300 premature deaths were due to PM_{2.5}. In this context the EPA welcomes all measures towards the reduction in PM_{2.5} and other pollutants including polycyclic aromatic hydrocarbons and sulphur dioxide from the burning of solid fuels. Specific points noted by the EPA are that:

- It is timely that current legislation is reviewed, in light of the volume of data and research studies indicating the impacts of a range of solid fuels on air quality. Particular priority should be given to all fuels with a higher smoke generation potential including bituminous coal, wet wood and peat. Infographics developed by the EPA including 'heating your home and it's impact on air pollution and health' have sought to communicate these issues and choices in an accessible way. Consideration needs to be given to both the smoke generation potential of fuels and their sulphur content. The sulphur content results in the generation of both sulphur dioxide and secondary PM_{2.5} with monitoring data showing concerning levels of both pollutants in several Irish towns.
- The impact of the location of solid fuel heating systems and the burning of solid fuels on localised air quality, in particular the contribution to elevated pollutant concentrations in urban, built-up environments requires careful consideration.
- Due to economic factors, legacy heating systems, geographic location or other factors many households currently rely solely on solid fuel heating to provide warmth in their homes. However, emerging research including from ongoing research shows that a significant percentage of Irish homes utilise solid fuel as a secondary heat source. Information campaigns to heighten public awareness of the impacts of these systems, particularly during periods of cold still air, given these systems are often supplementary to the heating needs of the householders, should be considered. This is even more acutely so where such secondary or supplementary systems are used to provide ambience; particularly in heavily built up urban areas where they will contribute to levels which all too frequently are above the World Health Organisation (WHO) guideline values for protection of human health.
- Ultimately, with the aim of improving the quality of the air we breathe, the public must be supported by Government in the choices they make, towards a transition to cleaner home heating choices.
- In the air quality chapter of the recently published *Ireland's Environment – An integrated assessment 2020* the EPA noted that the need for a National Clean Air Strategy (NCAS) supported by World Health Organisation (WHO) standards is more pressing than ever. The adoption of the tighter WHO guideline values as national air quality standards would provide for a higher level of public health protection. Therefore, adoption of measures to meet the WHO guidelines should be the target to aim for in the forthcoming NCAS.

Ecosystems –

Information from the EPA air emission inventories demonstrates that domestic solid fuel burning is a contributor to national emissions for a range of pollutants which can impact on human health, habitats and ecosystems. Any measures which are implemented to reduce emissions from residential burning of solid fuels therefore have the potential to contribute significantly to reducing national emissions across this range of pollutants.

In addition to impacting on human health, many of these pollutants are also known to impact on ecosystems, impacting on plant species and food crops, as well as impacting on both terrestrial and marine animals. For example, heavy metals such as mercury, lead, and cadmium are known to result in significant ecotoxicological effects in plants, animal, soil organisms and aquatic organisms. PM_{2.5}, a pollutant commonly associated with human health impacts has also been shown to impact on the aquatic environment, aquatic organisms and terrestrial ecosystems. Pollutants such as sulphur dioxide result in acidifying effects on freshwater ecosystems, negatively impacting on plant and animal species. These broader environmental impacts need to be taken into consideration in assessing the benefits of any measures to reduce emissions from residential solid fuel burning.

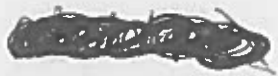
National policy frameworks -

The EPA again notes that the consultation on solid fuels has occurred in parallel with several other national policy frameworks in Ireland to which EPA input has been provided. Relevant previous parallel consultations and frameworks and which have had detailed submissions are as outlined below:

- National Clean Air Strategy Consultation – A submission was sent on 25th May 2017. The EPA looks forward to the forth-coming publication of the finalised strategy
- National Energy and Climate Plan (NECP) – A submission was sent by the EPA on 22nd February 2019 on the draft NECP, with the final NECP notified by Ireland to the European Commission on 4th August 2020
- 2019 Nitrates Derogation Review – A submission was sent on 21st May 2019, wherein the EPA highlighted the need for action to mitigate Ammonia emissions
- Draft SEA Screening for National Air Pollution Control Programme - Correspondence with specific comments on the NAPCP programme was issued on 18th February 2019
- Draft National Air Pollution Control Programme – Correspondence issued on 17th July 2019
- Updated National Air Pollution Control Programme (NAPCP) – An updated submission was sent on 12th February 2021

The EPA looks forward to the outcome from this consultation process and to working with your Department to support the implementation of the new regulations.

Yours Sincerely,

A thick, dark, scribbled-out signature.

Three lines of thick, dark, scribbled-out text, likely representing contact information such as name, title, and phone number.