25th March 2019

Dear Petitions Committee,

We are grateful for the response from the Future Generations Commissioner for Wales and the Children's Commissioner for Wales to our petition calling for enhanced air quality monitoring outside schools to better inform the interventions councils take to tackle localised air pollution.

We welcome reference to UNICEF's 2018 report 'A Breath of Toxic Air', among others. We would like to highlight additional research and evidence in relation to children's exposure to air pollution.

Children's lungs are particularly at risk. Air pollution exposure during pregnancy is linked with low birth weight and premature birth, which impacts on children's lungs.[i] Children exposed to severe air pollution are five times more likely to have poor lung development,[ii] and increased infection susceptibility.[iii] In addition, children's height negatively affects their roadside NO_2 intake,[iv] with everyday pollution linked to increased airway inflammation.[v]

It is clear from the number of sources referenced in the Commissioners' letter that leading health and environmental charities concerned with air pollution support our calls for greater monitoring outside schools.

The Welsh Government's current guidance adopts a risk-based approach to monitoring and adopting measures to tackle localised air pollution problems. As referenced in an earlier letter, we believe that Welsh Government should adopt a proactive health-focussed approach to monitoring, recognising that there is no safe level of pollution. This places the burden of demonstrating that air pollution levels are as low as practically possible – a commitment made by Welsh Government – on authorities, rather than the public and communities bearing the burden of demonstrating significant exposure to toxic air.

We recognise that resource for air quality work in Local Authorities is increasingly limited. However, with broader health implications associated with exposure to toxic air, long-term thinking would suggest taking account of future health challenges and impacts resulting from early exposure to toxic air, in line with public bodies' well-being duty. In addition, we would question whether resources can be maximised across Public Services Boards where air pollution has been recognised as a priority.

We welcome the Future Generations Commissioner's reference to calls for modal shift to sustainable transport to address a range of issues, including air quality. Road transport accounts for 80% of NO2 emissions which accounts for more than 11,600 Life Years Lost and 1,124 attributable deaths annually. Any measures which reduce the levels of toxic air are to be welcomed, however these measures are only likely to achieve compliance with EU limits and do not recognise that there are no safe levels of air pollution and any level of exposure represents a significant risk to public health. Increased monitoring will better inform the scope of ambitious measures such as Clean Air Zones to achieve the greatest impact.

Finally, if our efforts to tackle air pollution are to deliver meaningful positive public health change, we need to rethink our current approach of managing localised air

pollution problems in isolation. Evidence suggests that air pollution, poor health and deprivation stressors can combine as a 'triple jeopardy' to disproportionately affect high-risk population groups. [vi]

We need a new public health-driven approach to risk assessment which places air quality in a broader context, encourages policy and practice integration and helps create opportunities for more effective, efficient and collaborative ways of working. Doing so can inform universal action to reduce air pollution risks for everyone and enhanced targeted action to address specific problems in communities where air quality and/or public health is poorest. Enhanced air quality monitoring will help support a public health-driven approach to risk assessment.

We thank the committee for their ongoing work in considering our petition.

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[ii] Anderson, J. et al (2012) *Clearing the Air: A Review of the Effects of Particulate Matter Air Pollution on Human Health*. J Med Toxicol, Volume 8, pp. 166-175. p.170
[iii] Macintyre, E.A et al. (2014). *Air pollution and respiratory infections during early childhood: An analysis of 10 European birth cohorts within the escape project*. Environmental Health Perspectives, 122(1), 107-113. p.112
[iv] Kenagy, H.S. Lin, C. Wu, H. Heal, M.R. (2016) Greater nitrogen dioxide concentrations at child versus adult breathing heights close to urban main road kerbside Air Qual Atmos Health. 2016;9:589-595. Epub 2015 Sep 15.
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[vi] Brunt, H. and Jones, J.S. (2019*) A pragmatic public health-driven approach to enhance local air quality management risk assessment in Wales, UK.* Environmental Science & Policy pp.18-26