Public Consultation Monmouthshire County Council: *Response to Revised Local Development Plan (RLDP) and Proposed Development site referenced as CS0270 & HA4, with consideration of wider development issues in Monmouth*

by Frank Brehany

Contents:

1. Introduction:

Frank Brehany is a resident of the Buckholt in Monmouth. He is responding to the Public Consultation, called for by Monmouthshire County Council, following the successful vote to approve the RLDP (Revised Local Development Plan for Monmouthshire) and place the said document into the public domain. This is an independent submission.

Frank is both a retired Police Officer (1989) and Solicitor (2023) (England & Wales). For 27 years, he has gained considerable experience via Public Consultations through his Legal/Consumer/Social/Human Rights Activism. Since 2007, he has submitted over 80 reports and responses, engaged as a Stakeholder, Presenter, Impact Assessment Contributor, Drafter of Opinion and Clauses, within Westminster, the European Union, USA and Australia, through political and international standards fora.

Since 1997, he has been engaged in advocacy and working with other activists dealing with Consumer exposure to toxins, found through hotels, cruise ships, landfills, domestic exposure and since 2006, dealing with toxins that arise onboard civil aircraft. Frank is a regular podcaster, writer and media contributor. He is an author; his first book was published in 2021 on Aircraft Cabin Air Quality, with the second edition being published in 2025. He is publishing his second book on Magdalene & Human Rights issues in the Republic of Ireland, in 2025.

Through his experience, Frank considers that the issue of Air Quality and its effect on Human Health, whether that be at ground level or at 40,000 feet, presents a unique set of circumstances and challenges that have entered the mainstream of concerns and activism; he believes that solutions are best achieved through consensus.

2. The purpose that underpins this submission:

2.1 Introduction:

At face value, the RLDP delivers an impressive ambition for the demographic growth of Monmouthshire through residential development.

Frank notes how wider narratives on developments and the RLDP are either focussed on macro-issues or developed along political lines. When considering these narratives,

particularly by those who consider that responses should only be tailored to 'planning' issues, it is important to highlight that in any form of consideration, there are principle factors of concern followed by secondary but nonetheless important issues of concern – each creates the picture of the whole.

Therefore, Frank considers that there are 6 principal areas of concern that arise from the RLDP, those being:

- Air Quality arising from Traffic Emissions;
- Drinking Water Quality (not to be confused or conflated with the Phosphate issue);
- Issues that present counter-positions to claims on Demographics;
- The claims of Social Housing achievability;
- Public Transportation & Connectivity, and
- The belief that Business & Employment will follow from the objectives within the RLDP.

For the purposes of this submission, Frank will **only** present his opinions on Air Quality which arise from Traffic Emissions. He acknowledges that Air Quality issues can also arise from other sources, influenced by the potential for intervening traffic or other environmental factors or sources.

In responding to the Public Consultation, it is Frank's principle objective to highlight the considerable flaws contained not just within the RLDP but also through the LAQM (Local Air Quality Management – Technical Guidance document), related to the issue of Air Quality arising from Traffic Emissions in Monmouth.

It is those flaws that present a less than full picture of the reality of Air Quality arising from Traffic Emissions. It is his argument that the RLDP promotes a picture that does not have a solid or complete understanding of the effect on Air Quality in Monmouth or its Citizens. There is no comprehensive Chemical Compound data-set, no baseline upon which to make positive assertions on Air Quality in Monmouth. Therefore, the RLDP or other third parties, are unable to make claims in confidence about Monmouth's Air Quality nor project what the initial effect of 400 extra motor vehicles through CS0240/HA4, would have on Monmouth's environment.

Speculating further, if the additionally proposed developments for Monmouth is achieved (a possible 500 domestic dwellings), then this has the potential to introduce an additional 300 vehicles into Monmouth and its environs.

If the potential for an extra 700 vehicles is proven to be correct, then as the current RLDP stands, there is no opportunity to project-forward the impact these additional vehicles will have on Monmouth's environment and its Air Quality, along with the effect on human-health. These flaws arise simply because of the way in which the RLDP deals with this issue, along with what appears to be a 'de minimus' approach to the whole question of Air Quality monitoring arising from Traffic Emissions through the adoption of LAQM methodologies.

This submission will examine the issues arising from the RLDP & LAQM and its effect on this important planning consideration.

2.2: Monitoring & Information on Air Quality in Monmouth:

There are a number of concerns stemming from the methodology of Traffic Emission monitoring. It is these concerns that have either directly or indirectly fed into or directed the narrative contained within the RLDP. Those issues and concerns will be set out under the following sub-headings:

- Monmouth Citizens & The Welsh Government;
- Monmouthshire's Annual Mean Objectives – The Chemical Compound Threshold Limits and Particulate Matter;
- The WHO recommended threshold levels;
- Additional Commentary found within the Action Plans of the MCC's Air Quality Reports;
- Questions submitted on Air Quality; questions that remain unanswered;
- Additional Monitoring near to LS0270/HA4;
- PEMS & The Public.

2.3 Monmouth Citizens & The Welsh Government:

The population of Monmouth are entitled to access environmental information as defined under The Environmental Information Regulations 2004[1]. The provision of that information must be delivered and presented as a default to the general public and made freely available. Members of the public seeking access to that or additional information do not have to provide reasoning as to any request that they make. Monmouthshire provides a series of progress and annual reports which have the potential to be argued to be comprehensive in detail[2].

Monmouthshire derives its consideration on air pollution issues from the Welsh Government's strategy which can be viewed through 'Air Quality in Wales'[3].

The Welsh Government provides a rolling 24-hour summary of pollutants across Wales; it appears that Monmouth is not currently included in this 'live' reporting data-set[4].

Within the same data-set, the Welsh government defines risk to human health and how it should influence human activity[5].

The Welsh government appears to be monitoring for the following Chemical Compounds: Ozone (O_3), Nitrogen Dioxide (NO_2), Nitrous Oxides (NO_X), Nitric Oxide (NO), Sulphur Dioxide (SO_2), PM_{10}, $PM_{2.5}$. The current pollutant that is solely monitored in Monmouth appears to be NO_2. NO_2 is likely considered to be a Chemical Compound that can be said to be a reliable marker for the purposes of monitoring pollution arising from traffic, but, that does not reveal the whole picture of Chemical Compounds arising from Traffic Emissions; NO_2 can therefore only provide a narrow window of visibility into the broad issue of Traffic Emissions & Air Quality.

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[1] https://ico.org.uk/for-organisations/foi-eir-and-access-to-information/guide-to-the-environmental-information-regulations/what-are-the-eir/
[2] https://www.monmouthshire.gov.uk/air-quality/
[3] https://airquality.gov.wales
[4] https://airquality.gov.wales/air-pollution/24-hour-summary
[5] https://airquality.gov.wales/about-air-quality/daily-air-quality-index

It is perhaps important to consider and highlight the commentary of the World Health Organisation on air pollution matters[6]. Equally important are the considerations of the European Union[7]. Both provide a benchmark on this issue.

The UK provides its own consideration and benchmarks[8].

2.4: Monmouthshire's Annual Mean Objectives – The Chemical Compound Threshold Limits and Particulate Matter:

Thresholds are the unit of measurement by which it is said that a Chemical Compound should not exceed; there is a generic prevailing opinion that where a Chemical Compound does not breach that threshold, it either has no effect or a low effect or potential to adversely affect Human Health.

The principal trigger threshold limits have been set by Monmouthshire for the following Chemical Compounds:

NO_2 - 40µg/m3 annual mean average objective (that is: the amount of NO_2 expressed to be found as units of micrograms (one-millionth of a gram) per cubic metre of air).

Amongst the Chemical Compounds arising from Traffic Emissions are those known as 'Particulate Matter' (PM).

It is necessary to describe the PM variants. In relation to the matters under discussion, such PM's will originate from road vehicles through fuels, exhaust emissions, material degradation etc:

PM_{10} – This is the larger of the PM variants. It is ordinarily described as 'coarse particles' and they can be recognised via dust, smoke etc. These particles have an

[6] https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants
[7] https://environment.ec.europa.eu/topics/air_en
[8] https://uk-air.defra.gov.uk/air-pollution/

aerodynamic area of 10µg (micrograms) or smaller. PM_{10} particles can also include small particles such as $PM_{2.5}$ and $PM_{0.1}$

$PM_{2.5}$ – These are described as 'fine particles'. Their aerodynamic surface area is 2.5µg (micrograms) or less. They can present deep presentation into lungs and within the respiratory system.

$PM_{0.1}$ – These are described as 'ultra-fine particles' (UFP's). They have an aerodynamic surface area of 0.1µg (micrograms) or less. They can present a deeper presentation into the body's organs.

To demonstrate Monmouthshire County Council's (MCC) opinion at this time on PM's, they state:

"PM_{10} and $PM_{2.5}$ are very fine[9] particulates that can be carried deep into the lungs. Currently there are no exceedances of PM_{10} or $PM_{2.5}$ objectives in Monmouthshire"[10].

Further, the 2023 Air Quality Report states[11]:

"Generally, air quality in Monmouthshire is good, however there are some hotspots of poor air quality close to busy or congested roads. As such these roads are monitored closely for nitrogen dioxide, which is one of the main pollutants from vehicle emissions. In addition, one road is monitored for fine particles (PM_{10} and $PM_{2.5}$) as well as Nitrogen Dioxide…(on the pavement of the A48 in Chepstow)…Whilst there are no $PM_{2.5}$ objectives included in regulations for the purpose of the LAQM in Wales, we make consideration as to whether monitored $PM_{2.5}$ annual mean concentrations exceed either the 25µg/m3 EU Limit Value or the 10µg/m3 WHO Guideline. ***In 2022 neither the EU nor WHO value were exceeded (as measured by the automatic analyser)".***

[9] The commentary does not appear to make the distinction between PM10 (coarse particle) and PM2.5 (fine particle). The question of lung penetration is not evidenced but note Frank Brehany's additional commentary on the effect upon Human Health arising from PM2.5

[10] https://www.monmouthshire.gov.uk/air-quality/#:~:text=Currently%20there%20are%20no%20exceedances,5%20objectives%20in%20Monmouthshire.

[11] https://www.monmouthshire.gov.uk/app/uploads/2024/01/MCC_APR_2023_FINAL_27-09-23.pdf

The public could be forgiven for accepting that air quality in their towns in Monmouthshire is *'good'*. The reality however is that the *'objectives'* claimed for PM_{10} & $PM_{2.5}$ are very narrowly sourced, that source being Chepstow which has the benefit of being declared an AQMA (Air Quality Management Area) (the issue for Monmouth not being declared an AQMA area has been observed and noted by the author of this submission). The wholesale monitoring for Traffic Emissions and their Chemical Compounds are primarily limited to monitoring for NO_2 across Monmouthshire (noting that there are 14 monitoring stations in Monmouth for NO_2) – this they argue, and there is some support for this notion, that NO_2 is said to be a reliably found Chemical Compound where Traffic Emissions arise.

However, with regards to Monmouth, we know that this is not the case.

Frank refers to a report created by the Environment Agency[12]. This delivered the results from a monitoring study for NO_2, PM_{10} & $_{2.5}$, which was positioned by the Boy's School in Monmouth, in 2015. Whilst the results appear to show that air quality remains within limits, there was an interesting conclusion where they stated:

"Percentile rose analysis suggested that the monitoring site is affected by both intermittent and relatively continuous sources of PM_{10} and relatively continuous sources of $PM_{2.5}$".

It is suggested that this observation alone should cause concern in light of the Ella case (discussed below) and the nature of PM's and it raises the important question of the health effects of long-term low-dose exposure to PM's. A review of the 2023 Air Quality Report appears to make no reference to the issue of 'long-term, low-dose exposure' and its potential effect on Human Health.

[12] https://www.monmouthshire.gov.uk/app/uploads/2016/08/GL_Monmouth-final-version-of-report-00000003.pdf

2.5 The WHO recommended threshold levels:

It is perhaps important to highlight the various WHO recommended levels (2021) for **comparison purposes**[13]:

Nitrogen Dioxide (NO_2) - **10µg/m3 annual** mean average objective; **25µg/m3 average daily** maximum.

PM_{10} - **15µg/m3 annual** mean average objective; **45µg/m3 average daily** maximum objective.

$PM_{2.5}$ - **5µg/m3 annual** mean average objective; **15µg/m3 average daily** maximum objective.

2.6 Additional Commentary found within the Action Plans of the MCC's Air Quality Report 2023:

It was interesting to note one comment found within the Action Plan for Chepstow (Page 16)[14].

Under the section heading *'Include LDP Policy covering air quality'*, it accepted that MCC is the lead authority under this heading.

Under the heading *'Progress to date'*, the Action Plan states that: *'Policy in the LDP'*.

Under the heading *'Progress in the last 12 months'* they state: *"New LDP currently in progress and Air Quality will be a factor'*.

Under the heading *'Comments in relation to emissions reductions'*, the Action Plan states:

[13] https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants
[14] https://www.monmouthshire.gov.uk/app/uploads/2024/01/MCC_APR_2023_FINAL_27-09-23.pdf

"In the long term could be significant if affects major developments. However, there is a lot of pressure on MCC to increase housing in the south of the County. There are contradictory pressures from government of increasing housing and reducing vehicle emissions".

Whilst these comments are in some ways limited Chepstow, it is argued that they must universal applicability to Monmouthshire and in the present instance of this submission, to Monmouth. To support this observation, the Action Plan for Usk is also noted (Pages 11/12), where at item number 8, in relation to 'developments' & 'air quality', they observed:

"By ensuring local developments are planned with methods to reduce their impact on local air quality. Could be significant depending on the number of applications".

This overall MCC commentary has a clear set of implications:

- That Air Quality and Traffic Emissions must be central to the creation of a Development Plan;
- It suggests that Air Quality arising from Traffic Emissions could deliver significant impacts to or caused by any proposed development;
- The commentary arising from Action Plans for AQMA areas (Chepstow & Usk), strongly suggests the importance of a broad Air Quality monitoring methodology, followed by assessment and mitigation in determining any planning for developments;
- That there is a contradictory pressure on MCC on the need for more housing versus the need to reduce vehicle emissions – is MCC trapped in the headlights of this conflict?
- It could suggest that the imperative is now housing whilst relying on the 'de minimus' approach offered by the LAQM, on the broader County approach to Air Quality monitoring in Monmouth;
- It also suggests that the imperative has created an imbalance or conflict within the RLDP where apparently, *'Air Quality will be a factor'* – it is a question of the weight given to that factor or the *'development'* factor, and indeed the absolute need to understand the current base-level of Traffic Emissions in any town before any development plan is created and certainly before any planning permission is agreed.

2.7 Questions submitted on Air Quality; questions that remain unanswered:

In early 2024, Frank Brehany submitted questions to the lead Cabinet Member for MCC. Those questions were entirely related to monitoring methodologies in Monmouth.

The responses received revealed a heavy reliance upon the LAQM and guidance from DEFRA and the Welsh Government.

Whatever the generally accepted practice on how Traffic Emission Air Quality Management would be delivered, it apparently failed to understand and accept that within the LAQM, despite it being written in 'standards-type' language, it nonetheless presents an opportunity for MCC to deploy a wider practice and discretion on the issue of creating a broader monitoring methodology.

As a result of that initial exchange, Frank submitted follow-up questions to which he is waiting for a response.

Both letters can be found at **Annex's 1 & 2** respectively.

2.8 Additional Monitoring near to CS0270/HA4:

Frank Brehany delivered a presentation before MCC's Scrutiny Committee on the 10 October 2024; that presentation can be found at **Annex 3**.

On 24 October 2024, Cllr Griffiths acknowledged the points made by Frank and announced that for the period of the Public Consultation on the RLDP, extra Air Quality monitoring would be carried out near to the proposed site; no detail was provided as to what additional monitoring would be carried out.

Frank has considered this issue. He acknowledges that the points he made have been acknowledged and an action-plan has been created; he welcomes this action.

However, given that the said additional monitoring will only be carried out for a period of 6 weeks, he has concerns as to what will be achieved, particularly when measured against what type of Chemical Compounds or methodology is being deployed, along with intervening environmental and topographical issues.

Frank considers at best, it may provide some indicative data but more likely, it will offer little in the way of concern when in fact such an additional methodology should be situated at this and other locations in Monmouth for a longer period than 6 weeks, ideally 12 months, so as to establish not only the daily data on Traffic Emissions, but also their cumulative effect over that 12 month period. That would create a solid data-set from which decisions and projections can be made with greater certainty.

2.9 PEMS & The Public:

On 7 November 2024, Frank once again offered insight to the MCC's Scrutiny Committee; his presentation is attached to this submission at **Annex 4.**

PEMS or Portable Environmental Monitoring Systems were raised by Frank in his correspondence with MCC which can be found at Annex's 1 & 2. The initial response received from MCC relegated the use of PEMS due to its difficulty and unreliability. He has provided subsequent information which contradicts this position.

In his presentation to the Scrutiny Committee he highlighted how in many new motor vehicles, there exists in-car PEMS technology which not only demonstrates the quality of air in the cabin (notably $PM_{2.5}$), but also the opportunity to purge the environment of that car. The PEMS technology also advises the car-user of the nature of Chemical Compounds outside the motor vehicle. The display highlights, $PM_{2.5}$, PM_{10}, CO, NO_2, SO_2, O_3. The monitor will indicate the µg/m3-level for that particular compound. In terms of calibration it is likely to be updated via internet updates or through the vehicle's servicing schedule. An example of this technology can be found at **Annex 5.**

This should indicate that within Monmouthshire, there will be a reasonable number of Citizens who may well have such technology within their cars; it will not be long before a greater number will have that same benefit and from that, MCC and in fact many Councils and central Government should expect to receive many questions, particularly relating to an examination of how they deal with Air Quality arising from Traffic Emissions.

3. What are the issues of 'Air Quality' within the RLDP?

Introduction:

The RLDP or the Revised Local Development Plan for Monmouthshire[15] is one of the principal documents relating to this submission and of the issues contained therein.

For the purposes of this section, reference should also be made to the comments made by Frank Brehany before MCC's Scrutiny Committee on the 10/10/24 & 7/11/24 which can be found at **Annex's 3 & 4.**

How is 'Air Quality' or 'Traffic Emissions' referenced within the RLDP?

For the purposes of this submission, the RLDP document was searched using the following search terms:

"Traffic Emissions", "Air Quality", "Monmouth", "Developments", "Policy", "Residential Amenity", "Precautionary Principle".

At 8.3.2, the RLDP states:

"Although air quality in Monmouthshire generally meets current standards…".

It goes on to state that:

"Where it is considered that a development proposal may impact upon an AQMA, ***or exacerbate an existing problem, developers will be required to provide an assessment of air quality impact, together with proposals for mitigation".***

[15] https://www.monmouthshire.gov.uk/app/uploads/2024/10/Monmouthshire-Deposit-RLDP.pdf

It is therefore suggested that by using the discretionary methodology contained within the LAQM (that is by only deploying monitoring for NO_2 in Monmouth), MCC is able to rely on the phrase of meeting *"current standards"* when in fact we cannot know what the full extent of contaminants arising from Traffic Emissions are; the data does not exist to support this MCC statement.

Equally, we can see that when it comes to new developments, AQMA areas are given preference for assessments and actions. However, the RLDP does provide at 8.3.2 a potential solution for other areas where such developments may *'exacerbate'* an *'existing problem'.* But, how does MCC know if a problem is being exacerbated if Air Quality monitoring is not broad nor comprehensive enough and only seeks to rely upon monitoring for NO_2, as it does in Monmouth?

It strongly suggests that there is a two-tier methodology being applied against an already light-touch 'regulatory' environment.

Further, searches have revealed what can only be described as language that supports a 'de minimus' approach to the issue of Traffic Emissions and Air Quality monitoring.

At Strategic Policy S8 (Page 114), under the heading *"Residential Amenity",* we are provided with a brief glimpse into air quality issues and what may be required insofar as new developments are concerned. It states that actions *"must comply with and":*

"Incorporate satisfactory air quality measures for mitigating and/or reducing emissions, as appropriate".

So the RLDP provides a 'requirement' that the above measure be incorporated into the *"placemaking principles into the scheme[s]".* The principle is quite clear but it includes the words *"satisfactory"* and *"as appropriate",* thereby providing for an extension to the discretion already deployed through the LAQM. Further, it does not strengthen this principle by adding the 'Precautionary Principle' as a key objective to strengthen the methodology, assessments and solutions that such a principle could deliver.

Looking further into the RLDP, we can see how S8 is further added into the various Monmouthshire towns and their proposed developments.

At **HA1** under *"Air Quality"* it states:

"Incorporate satisfactory air quality measures for mitigating and/or reducing emissions".

It does not provide further insight or objectives on how this can be achieved; it could be considered as simply aspirational.

At **HA3** under *"Residential Amenity"* it states:

"The incorporation of satisfactory air quality measures for mitigating and/or reducing emissions. Development must not significantly worsen (either individually or cumulatively any air pollution emissions in areas where pollution levels are close to their objective or limit value levels, nor result in a breach of an air quality objective or limit value".

We can see that **HA3** is an AQMA area and therefore subjected to a broader monitoring for chemical compounds beyond NO_2.

The same Air Quality commentary is also applied under *"Residential Amenity"* for **HA5** which of course **is not** an AQMA area; it is suggested that this is a precedent for Monmouth.

At **HA11** under *"Residential Amenity"* it states:

"The incorporation of satisfactory air quality measures for mitigating and/or reducing emissions within Usk's AQMA. Development must not significantly worsen (either individually or cumulatively) any air pollution emissions in areas where pollution levels are close to their objective or limit value levels, nor result in a breach of an air quality objective or limit value".

But, for the purposes of this report it is important to note that **HA4** (Leasbrook – Monmouth), does not contain any further qualifying statement from Strategic Policy S8 on *"Air Quality"* nor *"Residential Amenity"* which references Air Quality.

It is silent.

It fails to recognise the individual or cumulative effect of a new development(s).

It strongly suggests that Air Quality is not an issue for Monmouth.

The absence of this important feature in relation to HA4 must be concluded to be based on a less than comprehensive data-set.

Whilst this submission concentrates its commentary on **HA4**, it is also noted that within Monmouth, **HA6, HA7 & HA8** do not contain qualifying statements stemming from Strategic Policy S8 on "Air Quality" or "Residential Amenity" and air quality.

Observations:

By any measure, the definitions on *'air quality'* & *'residential amenity'* are poor. They simply present a set of objectives that can only be described as aspirational.

Monmouth it would appear is a victim of a two-tier methodology when it comes to monitoring, data, understanding the issues and the potential for real valuable air quality assessments.

Whilst the RLDP is not short on ambition, it nonetheless reveals a poor understanding of Monmouth's local concerns on Traffic Emissions, the reality of traffic passing next to or through the town, and it does not present a factual nor evidence-based approach to the assertions contained therein.

It is regrettable, but in the absence of real data that deploys not only a broader monitoring for chemical compounds arising from traffic emissions, along with swab-sampling, PEMS technology etc, Monmouth now faces the prospect of increased emissions leading to poor

health outcomes. **It is the imperative of the now whilst ignoring the imperatives of the future; it will deliver a policy of *'kicking the can down the road'* for MCC's successors in title and indeed those future generations for Monmouth.**

4. What are the issues with the LAQM?

Introduction:

The LAQM or the Local Air Quality Management Technical Guidance (TG22), is the principal document that MCC refers to when responding to any queries relating to how Traffic Emissions are monitored[16]. Further, MCC relies upon the LAQM portal and advices received through DEFRA and the Welsh Government[17].

How is Air Quality for Traffic Emissions & its methodology referenced within the LAQM?

Frank has reviewed the LAQM and his summary of that review can be found within the letter dated 2/10/24 to MCC, which can be found at Annex 2.

For the purposes of this submission, the LAQM document was searched using the following search terms:

"Traffic Emissions", "Air Quality", "Monmouth", "Developments", "Policy", "Precautionary Principle".

The LAQM is noted also for its general non-prescriptive language, for example, the document contains words such as: *"could", "should", "might", "encouraged", "desirable".* The overall feel of the document is that it replicates the type of language found within Standardisation documents (both National & International), particularly those found within Standards Technical Reports. The LAQM is described as a *"technical guidance"* or

[16] https://laqm.defra.gov.uk/wp-content/uploads/2022/08/LAQM-TG22-August-22-v1.0.pdf
[17] https://laqm.defra.gov.uk

"TG22" so supporting these observations. In particular it is noted that Wales is not required to monitor or measure for $PM_{2.5}$ but it is nonetheless *"encouraged"*.

The summary of the LAQM found within **Annex 2** is again referred to. In particular it has been noted that paragraph's **4.30 to 4.32** of the LAQM provide generic conditional statements as to what should happen in the event of new developments being proposed.

To consider the potential actions arising from the aforementioned paragraphs, reference should also be made to the Annual Progress Reports on Air Quality created by MCC. Reference is made to pages 71 & 72 of the 2023[18] report which simply acknowledge the factors contained within 4.30 & 4.32 of the LAQM.

It is possible to argue that the MCC 2023 Air Quality report does not reflect the *'guidance'* contained within para 4.32 of the LAQM in that it does not:

"include a list of the major developments under consideration that might affect air quality".

In fact the 2023 MCC Air Quality report simply provides generic commentary on policy, specifically referring to Policy EP1. The generic commentary about EP1 seeks to explain that it:

"prevent[s] development proposals that would result in unacceptable risk or harm due to air, light, noise or water pollution, contamination or land instability. Development proposals that would cause unacceptable risk/harm to local amenity, health, the character/quality of the countryside or interests of nature conservations, landscape or built heritage importance due to risks associated with pollution, including air, will not be permitted. The LDP notes that where it is considered a development proposal may impact on an Air Quality Management Area (AQMA), or exacerbate an existing problem, developers will be required to provide an assessment of air quality impact, together with proposals for mitigation".

The comments referencing AQMA areas reveal a detriment to other towns within Monmouthshire (including Monmouth), particularly as they do not enjoy a broad

[18] https://www.monmouthshire.gov.uk/app/uploads/2024/01/MCC_APR_2023_FINAL_27-09-23.pdf

methodology in Air Quality arising from Traffic Emissions. However, Policy EP1's limitations can be overridden in the case of *"Air pollution", "Or any identified risk to public health or safety",* if:

"it can be demonstrated that measures can be taken to overcome any significant risk".

It presents a reaction to the LAQM, which in the absence of a comprehensive Traffic Emissions Air Quality data, potentially allows for a decision-making process to deliver a detriment to the Citizens of Monmouth and effectively, in its current state, allows for Air Quality not to be a principle factor when considering new developments within Monmouth.

Observations:

In summary, the LAQM is a discretionary document that appears to limit actions to currently monitor for only one chemical compound in Monmouth. MCC fails to recognise that whilst TG22 may only be classed as a *'technical guidance'*, the power of discretion works in both directions, that is, by taking actions in Monmouth that could be described as more comprehensive in Traffic Emissions Air Quality monitoring, than the current and what appears to be the 'de minimus' approach. It is this latter approach, justified by the use of the LAQM, that has not only failed Monmouth in fully understanding the broad issues of Air Quality monitoring, but the approach also fails to understand the broad base-levels of Traffic Emission contamination. It demonstrably fails to acknowledge the potential arrival of new developments within its 2023 reports, and the potential and necessary actions that arise from the LAQM through onward assessments. **This approach simply 'kicks the can down the road' for future generations, who will have to deal with the actions and methodologies deployed by MCC.**

In conclusion, i**t is not only a failure to consider, use, and deploy a wider discretion and methodology on Traffic Emissions Air Quality monitoring, as outlined above, that could potentially support the objectives of the RLDP, and give greater confidence to Monmouth Citizens, but also of the fundamental failure to deploy the Precautionary Principle within its considerations.**

5. The Precautionary Principle

There is no such thing as a risk-free environment.

But of equal concern are comments heard by the author of this submission from both Citizens and Local Politicians who when discussing the issues relating to the RLDP and housing developments, appear to dismiss the relevance of Air Quality. Those dismissals provides a free-pass to the RLDP on the basis that Traffic Emissions should be *"expected",* because Monmouth is a busy town and that the A40 passing through it provides the *"obvious"* reason why those emissions exist. **Perhaps the political comments heard have their basis found within the imperatives already discussed at 2.6 above?**

This overall rationale fails to understand the underlying concern of uncertainty. Uncertainty as to the effects of long-term, low-dose exposure to Traffic Emissions, uncertainty as to the effects on individual and community health and on local health-systems, an uncertainty as to what an extra 700 motor vehicles will have on Monmouth's Air Quality and its environment.

Uncertainty lies at the basis of how the Precautionary Principle works.

The Precautionary Principle (PP) was created through the Wingspread Statement[19] and created a methodology to deal with environmental/chemical risk factors. There is a considerable misunderstanding on what the PP means and how it is applied. Simply, it is a methodology that deals with potentially serious risks to the environment, health, uncertainty surrounding those risks and obligates a comprehensive assessment of the issue(s) under consideration. It causes the user of the PP to define methods of how to assess, analyse and understand the nature of that risk, followed by the design of mitigation methodology to reduce that risk. It enables a consideration that is comprehensive, the use of best available technology to achieve objects and goals, along with the possibility of substantially reducing the risks being assessed. Globally, the Precautionary Principle is found and used within

[19] https://www.sehn.org/sehn/wingspread-conference-on-the-precautionary-principle

Government[20] [21], Local Authorities and is contained with Laws[22] [23] and Standards[24]. Interestingly, through the UK's Environment Act 2021, the government includes the PP as part of the Principles that underpin the Act[25]. However, they severely limit its application by ensuring that it only applies to the Environment and as they state in their policy, the Act and its principles insofar as the PP is concerned, does not specifically apply to human health[26]! Over time, this will be challenged as that aspect is inconsistent with the International application & practice of the PP.

To demonstrate the UK government's inconsistent approach on the PP and how challenges will arise on environmental issues, reference is made to several UK documents where it is clear that where uncertainty exists and that there are risks to human health, then using precautionary approaches or the PP will help to mitigate those risks[27] (this reference was published in 2020), [28], [29] (this reference is taken from the UK Gov's own Green & Orange Books[30]).

There should be an expectation that the Welsh government and Monmouthshire County Council will have developed a PP policy and apply that policy. The policy, theory and practice of the Precautionary Principle or the Precautionary Approach should be applied in all areas where the environmental & health issues arising from vehicle emissions are subject to consideration.

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[20] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52000DC0001
[21] https://eur-lex.europa.eu/EN/legal-content/glossary/precautionary-principle.html
[22] https://eur-lex.europa.eu/legal-content/en/TXT/HTML/?uri=CELEX:02006R1907-20221217
[23] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002R0178
[24] https://standards.iteh.ai/catalog/tc/cen/ac55aa28-e19f-447a-8841-a8c4f18edbab/cen-tc-436
[25] https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted
[26] https://www.gov.uk/government/publications/environmental-principles-policy-statement/environmental-principles-policy-statement#fnref:11
[27] https://assets.publishing.service.gov.uk/media/5e21c408e5274a6c3be72203/short_guidance_note_-_precautionary_principle.pdf
[28] https://publications.parliament.uk/pa/ld200304/ldselect/ldsctech/110/110we29.htm
[29] https://assets.publishing.service.gov.uk/media/5a7af5bced915d670dd7fd58/Managing_risks_to_the_public_appraisal_guidance.pdf
[30] https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government/the-green-book-2020#list-of-green-book-supplementary-guidance

However, as the author of this submission has already discovered, which can be seen through the issues that he raises through 2.7 above and at Annex's 1 & 2, the issue of deploying the Precautionary Principle at County Council level is strangely absent.

As already discussed within Section 3 above, it is yet another example of light-touch regulation when perhaps MCC and local policy-makers could deliver significant beneficial outcomes both on Air Quality and the RLDP, through the deployment of the Precautionary Principle.

6. What are the obligations placed on Monmouthshire County Council by the Ella case?

Central government and some local authorities (this does not mean that other local authorities should not consider and apply these recommendations), are obligated to consider and take steps toward reducing traffic air pollution and its affects, are found through the Ella case[31].

This is the case where the Coroner determined that Ella's death was caused by air pollution arising from traffic emissions; it is a landmark coronial finding.

The Coroner issued a comprehensive Regulation 28 Report calling for action to prevent deaths; the report is dated 20 April 2021[32].

Key findings included:

"During the course of her illness between 2010 & 2013 she was exposed to levels of Nitrogen Dioxide and Particulate Matter in excess of World Health Organisation Guidelines. The principal source of her exposure was traffic emissions".

[31] https://www.ellaroberta.org
[32] https://www.judiciary.uk/wp-content/uploads/2021/04/Ella-Kissi-Debrah-2021-0113-1.pdf

"During this period there was a recognized failure to reduce the level of nitrogen dioxide to within the limits set by EU and domestic law which possibly contributed to her death".

Within the list of the Coroner's concerns, were the following important issues requiring action:

Concern 1: *"The national limits for Particulate Matter are set at a level far higher than the WHO guidelines. The evidence at the inquest was that there is no safe level for Particulate Matter and that the WHO guidelines should be seen as* ***minimum requirements".***

Concern 2: *"There is a low public awareness of the sources of information (such as UK-Air website) about national and local pollution levels. Greater awareness would help individuals reduce their personal exposure to air pollution. It was clear from the evidence at the inquest that publicising this information is an issue that needs to be addressed by national* ***as well as local government.*** *The information must be sufficiently detailed* ***and this is likely to require enlargement of the capacity to monitor air quality, for example by increasing the number of air quality sensors".***

On review of the Coroner's action-plan, he recommended that 'Concern 1' should be actioned by central government. On 'Concern 2', he again recommended that central should play a central role along with 2 London Boroughs.

This case has provided the base for all responses by government, local authorities & health professionals (note for example the recent initiative from Great Ormond Street Hospital regarding the need to consider/discuss with patients, their medical conditions set against the backdrop of the local environment that they live in, by including levels of NO_2 & $PM_{2.5}$ within their medical notes and records[33]).

To demonstrate the importance to health arising from PM's exposure, reference is made to a study from Queen Mary University, where it was discovered that nano-particles crossed through the placenta from other parts of the body and by implication into other organs of

[33] https://www.theguardian.com/environment/2023/dec/31/great-ormond-street-air-pollution-patient-homes-children-respiratory-illnesses

the body[34] [35] [36] [37]. Equally, scientific concerns on $PM_{2.5}$ also demonstrates what appears to be direct consequences on semen and sperm quality and production[38].

At section 2.7 above, the author's questioning of MCC on this particular case has not revealed a unilateral, proactive or discretionary response or set of actions, which would at the very least deliver upon the Coroner's recommendations. Indeed, when reviewing the issues contained within section 2 above, along with the issues arising from the Ella case, it currently demonstrates that MCC is not reacting to a developing knowledge which should inform and refresh their approach to Air Quality monitoring and Traffic Emissions (the practical application of the Precautionary Principle). From the responses received to-date, it would appear that MCC is deferring its broader responsibilities to central and regional government's; this deficit underpins those found within section 3 above.

7. Human Rights

In the creation of the RLDP, it should include as part of its broader core strategy, a recognition the Human Rights of the residents of Monmouth and indeed Monmouthshire.

A search of the RLDP under the terms, *'human rights'*, *'echr'*, and *'human rights act'* revealed that no such references existed within the current RLDP

There may be a prevailing view that Human Rights has no place within such an RLDP but it is submitted that this would be an error.

[34] https://www.qmul.ac.uk/media/news/2020/smd/air-pollution-particles-and-metals-found-in-the-placenta.html
[35] https://www.sciencedirect.com/science/article/abs/pii/S0048969720357648?via%3Dihub
[36] https://www.theguardian.com/environment/ng-interactive/2019/may/17/air-pollution-may-be-damaging-every-organ-and-cell-in-the-body-finds-global-review
[37] https://doctorsagainstdiesel.uk
[38] https://pubs.acs.org/doi/10.1021/acs.est.3c03928

The basis of Human Rights has its base in the UK's ratification and implementation of the European Convention on Human Rights[39]. This takes form in the UK Statute Books as The Human Rights Act 1998[40].

A good example of the applicability of Human Rights in action can be found within Environmental Impact Assessments[41] [42]. Those Rights for example, pertain to Article 2 – The Right to Life, Article 8 – The Right to Respect for Family & Private Life. In Wales, there are comprehensive Environmental Impact Regulations, particularly at Regulation 4, where the impact assessment must deal with specific issues[43]; Human Rights are impacted by those issues and the manner in which an impact assessment is constructed (including it could be argued, reliance on air-quality data that may not offer a comprehensive assessment in itself). It was curious to discover that following the recent receipt of a letter from a prospective developer on an EIA, MCC advised that public submissions would not be accepted nor considered; if correct, this has wider implications, particularly in relation to the human rights of the Citizens of Monmouth and indeed Monmouthshire.

Importantly, whilst the European Convention on Human Rights does not give a specific right to health[44], there is a wider academic and legal recognition that where Traffic Emissions cause adverse human health problems, then there is a potential for Articles 2 & 8 to be so engaged. Whilst many decisions made by the European Court on Human Rights deal with a wide variety of environmental cases, there has thus far been a limited review of rights arising from Traffic Emissions. One exception related to case brought against Germany[45] which accused the State of failing to deal with diesel emissions. However, a distinction **must** be made on this 2009 case because firstly, the case only appeared before the court on the question of admissibility and that the Claimants failed because they did not demonstrate why the State's *'Margin of Appreciation'* on environmental issues was flawed.

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[39] https://www.echr.coe.int/documents/d/echr/convention_eng
[40] https://www.legislation.gov.uk/ukpga/1998/42/contents
[41] https://assets.publishing.service.gov.uk/media/64a2ed5dbb13dc0012b2e5d5/B6_Environmental_impact_assessment_and_human_rights_v3.pdf
[42] https://www.ciel.org/Publications/EIA_Brief_Jun10.pdf
[43] https://www.legislation.gov.uk/wsi/2017/567/contents/made
[44] https://www.coe.int/en/web/impact-convention-human-rights/human-rights-and-health#:~:text=Although%20there%20is%20no%20specific,with%20by%20the%20European%20court.
[45] https://www.echr.coe.int/documents/d/echr/fs_environment_eng

It therefore did not deal with the wider-case issue that being the failure to take necessary actions to reduce emissions. That set of distinctions must now be measured against the Ella case (section 6 above) and a Bill stemming from that case, the Clean Air (Human Rights) Bill[46] (note my commentary in 2.7 above) along with the important decision(s) made against Switzerland[47] & other countries in failing to deal with Climate Change emissions. It must therefore logically follow that in future considerations, local authorities (along with national government's), will have to give full recognition to the potential engagement of Articles 2 & 8, particularly when dealing with public policy and development issues; as already stated, the RLDP does not give nor allude to that recognition.

Another area where Rights may accrue can be found within Well-being of Future Generations (Wales) Act 2015[48]. This requires the Welsh government and local authorities, overseen by a Well-being Commissioner, where Well-being objectives are set and action plans designed around targets (this goes some way to satisfying International obligations on creating a sustainability). One target area with relevance to this briefing relates to 'Air & Water' Quality.

In the Monmouthshire Well-being Assessment Report of 2022[49] they stated that:

"Monmouthshire does not have a significant industrial contribution to air quality, so the air quality in the county is almost completely due to transport-related emissions, with high levels of nitrogen dioxide and particulates from vehicles, which are particularly detrimental to health (This report references another report as their "180" reference – now re-referenced for the benefit of this briefing)"[50].

The area of Human Rights and their applicability (particularly on environmental issues, and the benefits that could accrue), should not therefore be underestimated. The absence of a reference to Human Rights within the RLDP and in particular to Air Quality deficits arising

[46] https://bills.parliament.uk/bills/3161
[47] https://www.echr.coe.int/w/grand-chamber-rulings-in-the-climate-change-cases
[48] https://www.futuregenerations.wales/wp-content/uploads/2017/01/WFGAct-English.pdf
[49] https://www.gwentpsb.org/wp-content/uploads/2022/03/Monmouthshire-section-WBA-March-2022.pdf
[50] https://www.monmouthshire.gov.uk/app/uploads/2021/01/MCC-AQ-APR-2020.pdf

from Traffic Emissions and proposed developments, presents a problematic position for the RLDP and the rights of existing Citizens in Monmouth & Monmouthshire.

8. Conclusion:

This submission has endeavoured to capture all prevailing issues in relation to the proposed development CS0270/HA4 and Air Quality issues arising from Traffic Emissions. It should be noted that other developments have also been briefly referenced within this submission, to reveal what must be the overall concerns on individual or cumulative development.

Those concerns have their roots in a lack of comprehensive data stemming from contaminants created by Traffic Emissions.

The simple argument is this: checking for one contaminant or chemical compound does not create a clear nor comprehensive picture. It does not provide an accurate base-level for Traffic Emission Chemical Compounds within Monmouth's environment. If there is no base-level then any onward proposal for development or their assessments, are built on sand.

The correct approach should be to create a comprehensive Chemical Compound monitoring methodology leading to the creation of that data-set before any developments take place.

This submission also demonstrates:

- The nature of thresholds and measurements in Monmouthshire;
- The early warning marker advising of *'continuous sources'* of $PM_{2.5}$ (& PM_{10}) in Monmouth which should be of concern;
- WHO & EU $PM_{2.5}$ thresholds and their non-use in Monmouth;
- The stated conflict for MCC between the imperative of building developments and controlling air quality found in the 2023 Air Quality Report;
- How it is recognised that developments can have a significant impact on air quality;

- Additional and temporary monitoring near to CS0270/HA4 and its likely outcome;
- PEMS technology;
- Conflicts and lack of fact-based evidence within the RLDP – a two-tier structure for Monmouthshire towns?
- The overpowering 'de minimus' discretion allowed by the LAQM and the failure to comprehensively deal with new developments within the 2023 MCC Air Quality Report, particularly for Monmouth;
- The need to deploy the Precautionary Principle;
- The failure of Human Rights within the RLDP.

It is the cumulative effect of the issues raised within this submission that should cause MCC to stop and think about:

- The methodology and lack of evidence to support proposals (particularly on Air Quality) within the RLDP;
- To question the methodology deployed when monitoring for Traffic Emissions and Air Quality – and whether to create a much broader data-set in Monmouth and arguably across Monmouthshire's towns which would ultimately inform and create a better RLDP;
- Whether the aspiration and objectives contained within the RLDP, on the question of Air Quality, simply reflects the conflict and battle of the imperatives of building vs air quality (as seen in the 2023 Air Quality Report), resulting in the former winning whilst the latter is kicked down the road for future generations?

In conclusion, it is difficult to see how MCC can justify of not only potentially agreeing to one development in Monmouth, but of several, based on the poor evidence to support the perspectives offered on Traffic Emissions and Air Quality within the RLDP.

This submission does not seek to ultimately defeat development but rather it is about causing MCC to step back and take action to correct the deficits contained within the RLDP on Traffic Emissions and Air Quality.

There is a need to create a better understanding of Traffic Emissions, its data-set, their effects on human-health, the problem of long-term-low-dose exposure to Chemical Compounds and how they can be projected into the future. It is about bringing added value to the proposals contained within the RLDP and bringing real value to Monmouth Citizens. Be the Council that finds the courage to step back, rethink, re-design and to create a truly sustainable future for all, particularly on Developments, Air Quality and Traffic Emissions.

Frank Brehany

2 December 2024

Annex 1: Letter from Frank Brehany to MCC, dated 25/3/24

25 March 2024

[redacted]

Monmouthshire County Council,

PO Box 106,

Caldicot,

NP26 9AN

Dear [redacted]

Monmouth Traffic Emissions & Monitoring

I have recently become concerned with regards to the traffic volumes in and around Monmouth and following a recent FOI on monitoring and chemical compound measurements, I was directed to the MCC's website to view the data.

Following that review, I considered that there were supplementary questions that I need to ask which is the reason I am writing to you.

Considering the current MCC methodology on monitoring chemical compounds, said to be reliably found through traffic emissions, could I ask that you consider and answer the following questions:

1. Why is the MCC only monitoring generally for NO_2 in Monmouth?

2. What steps have been taken to monitor & measure PM's, particularly PM2.5 in Monmouth, against the WHO's AQG's?

3. If there has been a deficit in the measuring of PM's in Monmouth, how will the MCC address that deficit?

4. Regarding the MCC's traffic emission monitoring programme in Monmouth, shouldn't that have been created by co-design, involving Monmouth Citizens – if this hasn't been done to date, how will that co-design now be achieved?

5. Has the MCC investigated, modelled or considered:
    i. The nature and sources of emissions;
    ii. Chemical transformations;
    iii. The impact of weather in their dispersal;
    iv. The impact of vehicle movements and pressure & chemical compound dispersal;
    v. The impact of Monmouth's topography & chemical compound dispersal
    vi. If not, why not, alternatively, if MCC has, what were the results of its findings?

6. Has the MCC considered other forms of investigation such as swab sampling from windowsills, roads, street furniture etc, in dry and post-wet weather, to obtain a broader and more accurate picture of the constituent(s) make-up of chemical compounds or of road dust – if not, why not, alternatively, if MCC has, what were the results of its findings?

7. What consideration and action has the MCC given to 'runoff' pollution?
    i. How do they monitor such pollution?
    ii. What readings have been taken from road drains/stormwater chambers?
    iii. What chemical compounds have been found from within these road drains and chambers and at the outflows into rivers?
    iv. What are the chemical compound structures found from the sediment taken from within these road drains or chambers
    v. If any of these haven't been measured or achieved, can you explain why that is the case, alternatively, if MCC has, what were the results of its findings?

8. In any aspect of its work on traffic emissions in Monmouth, has the MCC applied the Precautionary Principle, if not, why not – if it has, can you explain MCC's methodology on their approach to the Precautionary Principle (Note: I am aware of the limitations of the PP found within the Environment Act 2021 and its Guidance Note, and given the Ella case, I am confident that such a limitation will eventually be challenged)?

9. Has the MCC considered and deployed a series of PEMS (Portable Emissions Measurement Systems) in Monmouth to determine the actual concentrations of Chemical Compounds arising more accurately from traffic emissions, if not, why not?

10. If the MCC has used PEMS methodology, has the MCC created a more valuable model of chemical compounds measurements and their impact arising from those PEM's studies, if so, what do those results reveal?

11. Does the MCC accept the need to utilise best available technology and practice in their investigations?

12. Can the MCC explain how they have deployed best available technology on monitoring and measuring chemical compounds arising from traffic emissions?

13. Does the MCC accept the absolute need, when considering the effects on human health, the importance of **long-term low-dose exposure** to traffic emissions and in particular, exposure to PM's – can you explain how this is built into the methodology of the current monitoring plan – what further enquiries has the MCC made with local medical practitioners with regards to health patterns?

14. Given the construction, debate and passage of the Clean Air (Human Rights) Bill, what considerations or unilateral action has the MCC taken, made or will make in relation to its proposed clauses?

I look forward to hearing from you.

Yours Sincerely,

Frank Brehany

Annex 2: Letter from Frank Brehany to MCC - dated 2/10/24

2 October 2024

[redacted]

Monmouthshire County Council,

PO Box 106,

Caldicot,

NP26 9AN

Dear [redacted]

Monmouth Traffic Emissions & Monitoring: Response to [redacted] e mail dated, 22 April 2024

Introduction:

Let me begin by firstly apologising for the delay in commenting on [redacted] e mail which has unfortunately been due by my professional commitments. I am also grateful to [redacted] for forwarding a copy of [redacted] e mail.

I am grateful to [redacted] for referring to and linking to the LAQM (Local Air Quality Management) document (along with other references), which is used in support of the answers given. In particular I note how this reference is intended to demonstrate the *"government's evidence-based action planning to aid local authorities in their air quality duties".*

Given that the questions, responses and the attached documentation raise important and complex issues, it is necessary to respond to that complexity against my initial questions.

I will observe that the documents referred to were drafted and created by the previous government. It appears likely that at some stage, the new government will deliver further views/laws/changes to that which currently exists.

My original questions:

For the purpose of this correspondence, it will be useful if I reference my original questions which are set out in Annex 1.

The LAQM:

Again, for the purpose of this correspondence, I think that it would be useful to set out my examination and observations of the LAQM which were offered in support of the responses contained within [redacted] e mail dated 22/4/24. These observations are contained within Annex 2.

My responses to [redacted] own responses to my initial questions:

I have responded to [redacted] e mail of 22/4/24, raising my own follow-up questions; these are set out in Annex 3. I would be grateful if you could now address the issues I raise within and provide detailed answers to the questions contained in this annex along with referencing the original questions in Annex 1.

Conclusion:

I would be grateful if the issues I refer to and contained within the 3 Annex's could be reviewed and responded to.

I look forward to hearing from you in due course.

Yours Sincerely,

Frank Brehany

(2/10/24) Annex 1:

Original questions posed by Frank Brehany in his letter to [redacted] dated 25/3/24:

15. Why is the MCC only monitoring generally for NO_2 in Monmouth?

16. What steps have been taken to monitor & measure PM's, particularly PM2.5 in Monmouth, against the WHO's AQG's?

17. If there has been a deficit in the measuring of PM's in Monmouth, how will the MCC address that deficit?

18. Regarding the MCC's traffic emission monitoring programme in Monmouth, shouldn't that have been created by co-design, involving Monmouth Citizens – if this hasn't been done to date, how will that co-design now be achieved?

19. Has the MCC investigated, modelled or considered:
    i. The nature and sources of emissions;
    ii. Chemical transformations;
    iii. The impact of weather in their dispersal;
    iv. The impact of vehicle movements and pressure & chemical compound dispersal;
    v. The impact of Monmouth's topography & chemical compound dispersal
    vi. If not, why not, alternatively, if MCC has, what were the results of its findings?

20. Has the MCC considered other forms of investigation such as swab sampling from windowsills, roads, street furniture etc, in dry and post-wet weather, to obtain a broader and more accurate picture of the constituent(s) make-up of chemical compounds or of road dust – if not, why not, alternatively, if MCC has, what were the results of its findings?

21. What consideration and action has the MCC given to 'runoff' pollution?
    i. How do they monitor such pollution?
    ii. What readings have been taken from road drains/stormwater chambers?
    iii. What chemical compounds have been found from within these road drains and chambers and at the outflows into rivers?
    iv. What are the chemical compound structures found from the sediment taken from within these road drains or chambers

v. If any of these haven't been measured or achieved, can you explain why that is the case, alternatively, if MCC has, what were the results of its findings?

22. In any aspect of its work on traffic emissions in Monmouth, has the MCC applied the Precautionary Principle, if not, why not – if it has, can you explain MCC's methodology on their approach to the Precautionary Principle (Note: I am aware of the limitations of the PP found within the Environment Act 2021 and its Guidance Note, and given the Ella case, I am confident that such a limitation will eventually be challenged)?

23. Has the MCC considered and deployed a series of PEMS (Portable Emissions Measurement Systems) in Monmouth to determine the actual concentrations of Chemical Compounds arising more accurately from traffic emissions, if not, why not?

24. If the MCC has used PEMS methodology, has the MCC created a more valuable model of chemical compounds measurements and their impact arising from those PEM's studies, if so, what do those results reveal?

25. Does the MCC accept the need to utilise best available technology and practice in their investigations?

26. Can the MCC explain how they have deployed best available technology on monitoring and measuring chemical compounds arising from traffic emissions?

27. Does the MCC accept the absolute need, when considering the effects on human health, the importance of **long-term low-dose exposure** to traffic emissions and in particular, exposure to PM's – can you explain how this is built into the methodology of the current monitoring plan – what further enquiries has the MCC made with local medical practitioners with regards to health patterns?

28. Given the construction, debate and passage of the Clean Air (Human Rights) Bill, what considerations or unilateral action has the MCC taken, made or will make in relation to its proposed clauses?

(2/10/24) Annex 2:

The LAQM (aka Technical Guidance (TG22):

Examination and observations of the LAQM:

I have extensive standards-making experience at International level and would comment that the LAQM document has the look and feel of a standards technical report document (except for a few requirements). To demonstrate that opinion, the general tenure of language suggests that local authorities actions should be *'encouraged'* or *'desirable'*.

I note also that it is peppered with limitations, conditional language and exclusions. Despite its limited nature (I also refer below to an important limitation also found within the Environment Act 2021), it does provide a route map or a discretion to many of the issues I raised, to which the responses did not demonstrate how compliance was achieved in those areas. It is suggested that the responses received, preferred it seems, to provide generic/referral statements in relation to that documentation.

I have examined the LAQM and I observe and note that:

1. At para **1.15** it specifically states: *"In Wales, monitoring and reporting of $PM_{2.5}$ is encouraged but not mandatory"* (this is supported by Table 1.1)(the para goes onto to guide the Welsh government and MCC on what must be included within their annual progress reports);

2. At para **1.56** it advises of the statutory requirement to report on NO_2 and PM_{10}. It goes on to say that: *"reporting of $PM_{2.5}$ is encouraged but not required. Authorities in Wales are not required to report on SO_2, Benzene, 1,3 Butadiene, Carbon Monoxide or Lead, unless there is a local issue that needs to be addressed";*

3. Para **1.57** goes on to state that: *"Local Authorities in Wales are encouraged to develop and report policies to reduce overall levels of NO_2, particulate matter and environmental noise pollution for the population as a whole";*

4. **Box 1-1** reveals the exemptions of physical areas that will not be tested, based on the averaging period of testing along with what appears to be assumptions about where and for what period the public have access to;

5. I have noted the general issues contained within **Chapter 2 and Air Quality Action Plans (AQAP's);**

6. At **2.11** the LAQM advises that: *"It is recognised that there is not a 'one size fits all' approach to developing AQAPs. They should be adapted to every local situation and most importantly are seen as part of an integrated package of measures".*

7. At **2.12** I have noted the 8 key features that must be deployed in the development of an effective AQAP;

8. I note that at para **2.16** it calls upon local authorities *"to identify all areas where air quality objectives are being or are likely to be exceeded"*;

9. At para **2.17** it states that: *"This should mean that sufficient monitoring and/or assessment be carried out, so that the required reduction in pollutant emissions to attain the objectives can be estimated thus allowing the authority to confidently judge the scale of effort required within the AQAP";*

10. Importantly, para's **2.18 to 2.25** inclusive, defines how assessments should be carried out and indeed impliedly calls on Authorities to be aware of <u>future factors or developments in such assessments</u>, ongoing work and of the AQAP itself;

11. Interestingly, at para **2.26**, the LAQM appears to require Authorities to clearly expect that not only assessment and monitoring is carried out but to <u>understand the factors</u> that will help them in their decision-making processes to *'tackle air pollution';*

12. I have noted the references referred to at para **2.32**;

13. I have noted the obligations required at **2.34 (Local Steering Group)** – this is the all-important <u>Stakeholder engagement provision</u> which is detailed from para's **2.34 to 2.44** inclusive;

14. I have also noted the important collaboration & identification factors at para **2.38** that should be considered, in some cases, before an AQAP is developed;

15. I note at para **2.68** it advises that *"Welsh air quality exposure indicators for NO_2, $PM_{2.5}$ & PM_{10}* [are found to be] *established under the Well-being of Future Generations (Wales) Act 2015".* A check of the Future Generations Commissioner for Wales website does not reveal *'exposure indicators'* but presents broader policy decisions about decarbonisation and creating a better transport infrastructure. I have also reviewed the 2015 Act, in particular, section's 4 & 7, but could not find specific references to *'exposure indicators'*;

16. With reference to para **2.71**, it refers to the *'toolbox'*, comprising of *'key guides'*, for example: air pollution – '*the latest evidence and techniques'*; understanding air pollution in a given area, *'engaging local decision-makers'* about air pollution, communication, and, *<u>'an emerging public health issue'</u>* relating to air pollution;

17. I have noted how the LAQM refers to modelling & monitoring at para **2.74,** and how these factors were to be *<u>'encouraged'</u>*;

18. At **2.76** I noted the lack of statutory authority to review and assess $PM_{2.5}$ and that *"it is acknowledged that many local authorities do not presently monitor $PM_{2.5}$ concentrations in their local authority area"*. It was noted however that *"an increase in*

local authorities monitoring $PM_{2.5}$ across the UK is desirable given the links to the Public Health Outcomes Frameworks (it goes on to talk about 'prohibitive costs')";

19. I have noted the modelling guidance given at para **2.78**;

20. At para **2.83** I note the references made to the other *'source'* argument (an understandable feature throughout the document);

21. I note how at para **2.84** reference is made to the *'toolbox'*, the *'Hub'* and how they would be *"likely beneficial to reducing $PM_{2.5}$ levels (*in addition to other pollutants*)"*. I also note the commentary about current actions to address PM_{10} & NO_x, encouraging authorities to *'review'* and *'determine'* whether they are *"already taking positive action to reduce $PM_{2.5}$ emission"';*

22. At **4.27** (Minimum Requirement for Progress Reports Section), it states: *"Authorities may find it helpful to report on their monitoring for pollutants not covered by the regulations, for example, O_3, PAH, etc, as well as other air quality data, for example, odour complaints, dust deposition, radiation monitoring, etc. Authorities may already be reporting such data to members of the public, so it should be straightforward to include this information";*

23. Para **4.30 to 4.32** is entirely relevant to Monmouth given a number of proposed planning developments/applications which amount to large-scale housing developments being proposed for the town. **It would perhaps be interesting to hear within my questions exactly how MCC is complying with 4.30 to 4.32?;**

24. **At Box 5-1**, under *'relevant pollutants'*, I note the absence of $PM_{2.5}$ as a *'relevant pollutant'*;

25. I have noted the factors at **Box 5-2** to be considered;

26. I have also noted the section headed: *'Emission Source Categories to Consider'*. In particular para's **5.14 to 5.17** inclusive;

27. I have particularly noted the officially imposed limitation of monitoring for Chemical Compounds at para **7.12 (contradictory against the 'encouraged', 'desirable' narratives?),** along with a descriptive of road types/traffic and human passage when carrying out any assessment. The limitation referred to is reflected within **Table 7-1**;

28. At **Box 7-5**, I have noted the methodology to calculate source apportionment;

29. At **Box 7-7**, I have noted he methodology to calculate concentrations from $PM_{2.5}$ & PM_{10};

30. At **Box 7-8,** I have noted the bullet points which indicate the basic considerations before proceeding with Air Quality Monitoring;

31. At para **7.185** I have noted the disparity between Scotland and the rest of the UK when it comes to measuring for $PM_{2.5}$ (Scotland annual average should be below 10 µg/m3 **(UN Threshold?)** – the rest of the UK *"no objective for $PM_{2.5}$ annual mean")* **(contradictory against the 'encouraged', 'desirable' narrative**?)*;*

32. I have noted the issues discussed about Particulate Matter Resuspension at para's **7.299 & 7.300 (relevant to my question(s)?)**;

33. I have noted the guidance contained within the LAQM's helpful Section 4, relating to the very extensive models relating to Dispersion Modelling of Emissions **(relevant to my question(s)?)**;

34. I have noted the LAQM's Action Toolbox at **Annex A**. I think it is reasonable to say that this is more of a tick-box checklist to applied against the broader policies of sustainability (relevant to the UN & EU's Sustainable Policies and that of the 2015 Act). It also suggests a reliance on measures obligated upon and created by industry. As a toolbox, it does not add to my observations nor indeed my original questions and by implementing these actions, those using the toolbox can as a matter of routine state that they are reducing $PM_{2.5}$, but given that Wales is apparently not obligated to monitor for $PM_{2.5}$, that conclusion can only be subjective in the absence of monitoring data, otherwise, MCC is operating in the dark. The toolbox is an aspirational checklist, nothing more.

35. Finally, I checked the LAQM for reference to the *"Precautionary Principle"* (PP). At para **7.43**, at **bullet point number 2**, there is a reference to a *"precautionary approach"* relating to the assessment of stacks (note my comments in Annex 3 about PEMS). Within the Action Toolbox, there is reference to the *"polluter pays principle"* when discussing tradable permits. Both of these phrases cut to the heart of the Precautionary Principle, found within the Wingspread Statement, followed by successive references contained within EU policy documents and legislation which of course the UK used to be obligated to follow. Interestingly, through the **UK's Environment Act 2021**, the government includes the PP as part of the Principles that underpin the Act[51]. However, they severely limit its application by ensuring that it only applies to the Environment and as they state in their policy, the Act and its principles insofar as the PP is concerned, does not specifically apply to human health[52]!

[51] https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted
[52] https://www.gov.uk/government/publications/environmental-principles-policy-statement/environmental-principles-policy-statement#fnref:11

(2/10/24) Annex 3:

The responses to my questions; my further observations and questions:

DEFRA & the LAQM:

At the beginning of [redacted] e mail, he refers to DEFRA and the LAQM; I have already provided comment and observation which is set out in Annex 2.

The 'Air Quality Consultants':

[redacted] then provides information that based on my questions, he consulted with the 'air quality consultants', which I assume to mean those consultants employed by DEFRA. The e mail goes onto state that:

"Their opinion was that given the current recorded levels of nitrogen dioxide in Monmouth and monitoring actions related to exceedances, we are acting in accord with the guidance, and that additional monitoring would exceed requirements of the LAQM guidance for Local Authorities".

I disagree. I disagree because insofar as Monmouth is concerned, there would appear to be a de minimus approach to monitoring and collecting a broader data-set, without developing and applying a multi-disciplinary approach and what appears to be a failure to consult regularly, particularly through your steering group.

For the present, TG22 & the 2021 Act reflect the deregulatory 'de minimus' approaches made by the last government, against a backdrop of legal findings and growing public concern about the effect of emissions on public health.

My disagreement is also based on the LAQM document, which despite its limitations also provides a positive discretion that could be deployed by a local authority. Based on the reading of this document and [redacted] responses, I consider that there are issues arising from the LAQM document which I have set out in Annex 2.

I would also observe that if the air quality consultants are indeed employed by DEFRA, then, subject to further information, they may not be local consultants and therefore have no particular knowledge of the issues of Monmouth, except perhaps those items of information obtained through MCC reports or other sources.

My follow-on Questions:

For ease of reading, I shall maintain reference to my question numbering and your responses to those questions:

Question 1: I have noted the issues contained within [redacted] response.

I have noted the presumption (widely held), that NO_2 is said to be a reliably chemical compound when considering the nature of traffic emissions and this leads to a decision made by MCC (based on guidance they have received) to place diffusion tubes to monitor for NO_2.

I am not certain that I would agree that particulate matter would not generally occur from traffic sources, when it is clear that it will occur (amongst other chemical compounds/sources) from exhaust/wear & tear/road sources whatever about exhaust emissions. I have noted the commentary for these issues through the following footnotes[53] [54].

I also noted the reference to the Corus Steelworks and to Chepstow. Whilst they provide interesting facts, I fail to see how they add anything to the concerns and my questions relating to Monmouth.

In order to understand those concerns, I note important commentary, firstly from a previous monitoring in Monmouth and secondly a recent report relating to health concerns:

1. **There was an interesting report created by the Environment Agency[55].** This delivered the results from a monitoring study for NO_2, PM_{10} & $_{2.5}$, which was positioned by the Boy's School in Monmouth, in 2015. Whilst the results appear to show that air quality remains within limits, there was an interesting conclusion where they stated:

   "Percentile rose analysis suggested that the monitoring site is affected by both intermittent and relatively continuous sources of PM_{10} and relatively continuous sources of $PM_{2.5}$".

   It is suggested that this observation, *"relatively continuous"*, alone, should cause MCC concern in light of the Ella case and the nature of PM's, not just at this

[53] https://uk-air.defra.gov.uk/assets/documents/reports/cat09/1907101151_20190709_Non_Exhaust_Emissions_typeset_Final.pdf
[54] https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2112201014_1272021_Exaust_Emissions_From_Road_Transport.pdf
[55] https://www.monmouthshire.gov.uk/app/uploads/2016/08/GL_Monmouth-final-version-of-report-00000003.pdf

location but across the town, and raises the important question of the local health effects of long-term low-dose exposure to PM's through the finding of *"relatively continuous sources".*

2. The question of male infertility following a long period of exposure to $PM_{2.5}$ has been established in a long-term study[56]; this alone should also be a cause of concern for MCC, requiring a wider view/actions to be taken against wider public health issues. This is important when considering the observations contained within the LAQM at para's 2.71 & 2.76. To support the aforementioned study, an earlier report also found decreases in sperm quality & motility through exposure to $PM_{2.5}$.

In conclusion, whilst the question focussed in on the issue of NO_2, there is it would appear, an approach to monitoring in Monmouth which reflects a 'de minimus' approach; how will this be corrected?

Question 2:

I have noted the response which generally refers me to the author's previous response. It also refers me to the 2015 study.

I do not consider that this question has been answered. I would refer to the response I have given in Question 1 above and ask for this question to be reconsidered and to explain given the concerning report of the Environment Agency of a *"relatively continuous"* presence of $PM_{2.5}$ at that same location (an perhaps in other parts of the town); how does MCC propose to react to this and the premise of my question, particularly as the 2015 study is now 9 years old?

Question 3:

The generic response given is that MCC has complied with Guidance and Law. The response does not acknowledge the discretion given by the LAQM nor indeed it would appear to a continuous stakeholder engagement in Monmouth.

Bearing in mind the factors contained within para's 2.18 to 2.25, how does the MCC propose to respond to the question and develop relatively near to interim processes to address these concerns?

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[56] https://www.theguardian.com/society/article/2024/sep/04/air-pollution-harms-male-fertility-while-women-face-similar-risk-from-noise-study-finds#:~:text=Across%20the%2018%2Dyear%20period,was%20associated%20with%20a%2024%25

Question 4:

Again the response directs me to MCC's compliance with Guidance & Law whilst failing it seems to recognise its potential discretion found within the LAQM.

Noting the obligations contained within para's 2.34 to 2.44, I was concerned to read that it appears that the last stakeholder engagement took place in 2012 – some 12 years ago.

I would be grateful if my question could be considered again and responded to, and in particular, to explain whether MCC has indeed created a steering group which should include local interested parties, particularly when designing AQAP's (Air Quality Action Plans)? Could the response also demonstrate how and which local interested parties are so engaged and the frequency of those consultations, if any? Could you also explain how co-design is and has been achieved? I think that this question has a greater importance, given the apparent obligation found in 4.30 to 4.32, in relation to housing developments etc; could you provide comment and guidance on what actions have been taken in light of the various proposed housing developments in Monmouth under 4.30 to 4.32?

Question 5:

I do not think this question has been answered, particularly given the nature of the aforementioned reports. It seems to me that there is an absence of the consideration of the factors contained in this question and which are dealt with in some considerable detail within the LAQM. It also raises the key question of consultation and stakeholder involvement, or lack of.

Could this question be considered again and responded to with greater detail, bearing the points I have raised immediately above and to those found earlier in this letter?

Question 6:

I have noted the response which refers me to the generic table created within the LAQM. The generic nature of this table does not reflect the real-world values found in Monmouth. The reliance on this table must be erroneous given the nature of the discretion and contradictions found within the LAQM. Equally, it is difficult to see how you can place such a reliance on this table in the absence of deploying that discretion and a greater methodology and failing it would appear to carry out a reasonable consultation or having a stakeholder involvement.

Could this question be considered again and responded to with greater detail, bearing in mind the points I have raised immediately above and to those found earlier in this letter?

Question 7:

I do not think this question has been answered, particularly given the nature of the guidance found in the LAQM. It seems to me that there is an absence of the consideration of the factors suggested in this question and which are dealt with in some considerable detail within the LAQM. It also raises the key question of consultation and stakeholder involvement, or lack of.

Could this question be considered again and responded to with greater detail, bearing the points I have raised immediately above and to those found earlier in this letter?

Question 8:

The answer relating to the precautionary principle is disappointing. It is a holding answer for if and when guidance or law changes. I am assuming that those considering this issue will be scientifically qualified and will appreciate the importance of the precautionary principle. I also consider that this answer fails MCC, because whatever the guidance or law states, in a litigious scenario, I am certain that questions relating to actions and consideration of the precautionary principle would be raised; referring to a guidance or a limiting law (see my comments above relating to this issue and the Environment Act 2021 above), and it will not serve the interests of the MCC. It would therefore seem prudent and appropriate for the officers of the MCC to utilise best practice and deploy the precautionary principle into their dealings.

Therefore, I would be grateful if the question could be reconsidered and responded to as to whether the practice of the precautionary principle is defined/practiced/central to all environmental/scientific operations/assessments of the MCC, and how it is applied at a local level based on the issues found within my questions, independent of any legal or guidance provided?

Question 9:

Comment: I had noted from the LAQM that PEMS were not so proscribed (I think that this was a typographical error; I think it should read 'prescribed'). However I would refer you to my footnote[57]which links to the UK governments own study on this and other issues. That study refers to PEMS containing the components that provide monitoring and measurements on a number of chemical compounds, but overall, that paper appears to reduce the effectiveness of PEMS, in part because PEMS is a developing tool in monitoring traffic emissions but it

[57] https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2112201014_1272021_Exaust_Emissions_From_Road_Transport.pdf

highlights the proposition that: *"There are inherent difficulties in calculating road traffic emissions to a high level of accuracy",* and the need to incorporate a wider understanding and sharing of data/information. However, because we must take a broader look at the technology, and as we can see from the European Union, they take a more optimistic view (whilst accepting some difficulties with this developing technology) as being capable of monitoring & measuring for chemical compounds, including PM's. In fact they state that: *"PEMS provide a complete and very accurate real-time monitoring of the pollutants emitted by the engines"*[58]. In support of their views they provide access to a number of academic studies[59]. I have noted with interest the UK government's own advices on how to measure stack emissions (referred to in the LAQM) using PEMS[60]. More recent academic articles also point to their potential value in monitoring and measuring chemical compounds, including PM's[61] [62] [63] [64].

Whilst this is a very interesting area to examine, I again note the lack of prescription on this methodology of monitoring & measuring. I would hope that MCC is maintaining a strong academic approach to looking toward best available technologies such as PEMS, which of course would be demonstrative of their subscription to the Precautionary Principle whilst feeding into any UK development of narrative/decisions?

Question 10:

Comment: I have noted the response and I would refer to my comment in question 9 above.

Question 11:

I think there must be a typographical error within the answer given because I have not detected any 'proscription' on BAT & BAT for local authorities (in other words to forbid or outlaw such issues). I have therefore assumed that the answer meant to state that BAT etc had been 'described' in the LAQM.

Noting that Wales is not required to test for $PM_{2.5}$, but that the LAQM refers to the encouragement or desirability to do so, suggesting that there is a discretion which perhaps MCC should deploy on a more regular basis than it appears to do? It is interesting to note that

[58] https://joint-research-centre.ec.europa.eu/scientific-tools-and-databases/portable-emissions-measurement-systems-pems_en
[59] https://joint-research-centre.ec.europa.eu/document/download/5aa1dc7e-0a6e-49b9-aa86-f6961ecf442e_en?filename=overview-results-euro-5-6.pdf
[60] https://www.gov.uk/guidance/monitoring-stack-emissions-standards-for-continuous-monitoring-and-sampling#standard-for-pems
[61] https://www.jstor.org/stable/26275453
[62] https://www.sciencedirect.com/science/article/abs/pii/S135223101930113X
[63] https://www.mdpi.com/1660-4601/16/23/4819
[64] https://www.mdpi.com/1424-8220/19/24/5531

UK government describes this area as 'Best Available Techniques' within the industrial scenario, calling for such entities to: *"prevent and reduce emissions to air, water and land"*[65]. It suggests that whilst companies are required to provide deliverables on emissions (including vehicle manufacturers), local authorities are being provided with a standards-like LAQM document, reliant on the actions of others?

Therefore, whilst it is suggested that reviews and assessments submitted to the Welsh government, prove that BAT is carried out, it is not clear that this is represented within your online reports. It would be helpful if you could provide detail and examples relating to the question asked?

Question 12:

I have noted the answer provided and I would refer to my response to Question 11 above.

Question 13:

Noting the requirements on health contained within the LAQM, I do not consider that this question has been answered at a more macro level. It would be interesting to understand your local methodology against the generality of the reports you produce.

Therefore, I must re-pose this question because it is of significant importance when trying to understand the decisions that are made within a AQAP:

"Does the MCC accept the absolute need, when considering the effects on human health, the importance of long-term low-dose exposure to traffic emissions and in particular, exposure to PM's – can you explain how this is built into the methodology of the current monitoring plan – what further enquiries has the MCC made with local medical practitioners with regards to local health patterns?".

Question 14:

I have noted the answer which simply advises me that MCC supports and will comply with the law, if and when passed!

[65] https://www.gov.uk/government/publications/establishing-the-best-available-techniques-for-the-uk-uk-bat

The question was seeking to determine whether MCC had considered the content of the proposed law and whether it had or intended to unilaterally transport some of the issues into current policy or other MCC documentation?

So, what considerations or unilateral action has the MCC taken, made or will make in relation to the proposed clauses contained within the proposed Bill, noting perhaps that the Bill may not pass, but of course it would be good practice on the part of MCC, particularly when placed against the objectives of the Welsh Well-Being Act?

Annex 3: Frank Brehany's Presentation to MCC's Scrutiny Committee – 10/10/24

Thank you Chair for the opportunity to speak to the development at Leasbrook CS0270 & Policy HA4.

I initially refer you to Policy S8 & the generic statement of *'incorporating satisfactory air quality measures'* to mitigate and/or reduce emissions. Whilst additional measures on traffic emissions beyond S8 are stated within HA1 (Abergavenny), HA3 (Chepstow), HA5 (also Abergavenny), HA11 (Usk), these additional measures on residential amenity are strangely absent from HA4 (Monmouth).

I believe that this arises from a failure to go beyond the wide discretion allowed within the LAQM, which MCC relies upon in its monitoring activities in Monmouth.

Whilst I understand MCC's imperative to primarily monitor for NO2, it only presents part of the emissions problem in Monmouth. Let me guide you to a finding from a short study monitor placed by Monmouth School and the A40 (2015), where it was found that both PM10 & PM2.5 presented themselves as *"continuous sources"* within Monmouth's environment. The methodology of monitoring in Monmouth is flawed by reference to the LAQM (indeed the LAQM is flawed) and when the current data-set is presented against HA4 (for which I have not seen any risk assessment as required by para's 4.30 to 4.32 of the LAQM), it strongly suggests that HA4 suffers a fundamental deficit of official emissions data. In other words, we cannot truly understand the environmental and health issues presented against this proposed development because of a failure in official monitoring methodology and in data.

These failures also present what I consider to be a failure by MCC to deploy the Precautionary Principle and indeed the findings of the Ella case.

I urge MCC to reconsider HA4 and to either reject this development for lack of data, real or projected emissions data or to import a stronger HA3 narrative on residential amenity and to bring about a better methodology and data-set before considering approval for this development.

Thank you for listening to me.

Annex 4: Frank Brehany's Presentation to the MCC Scrutiny Committee – 7/11/24

Good afternoon Ladies & Gentlemen. My name is Frank Brehany from the Buckholt in Monmouth – I am here today in an independent capacity. Thank you Chair for the opportunity to speak to the development at Leasbrook CS0270 & Policy HA4, the letter dated 4/10/24 from the developers to MCC which argues against the need for an EIA, and generally on traffic emissions.

The said letter, under *'risk to human health'*, states: *"There is considered to be a low level of risk to human health (for example, due to water contamination or air pollution) as a consequence of the Proposed Development".*

The RLDP at para 8.3.2 states: *"Air quality in Monmouthshire generally meets current standards"* providing as it does a qualification for AQMA areas or those where an emissions problem is exacerbated and in those circumstances for developers to *"provide an assessment of air quality impact, together with proposals for mitigation".*

I will also remind you of the statement on Monmouth made on 24/10/24 by Cllr Griffiths: *"Environmental Health Officers monitor air quality across the County the evidence is that this site has permissible air quality levels according to Nationally Set Standards, the evidence has not led to this area being an Air Quality Management Area…nevertheless, as a consequence of the strong points made at the scrutiny ctte, I have asked for further testing at this site takes place during the public consultation".*

The strong points referred to were made by me on 10/10/24 before this Committee. To refresh your memories, I pointed to the weakness of language & terminology used in Policy S8 (Air Quality) and the further inconsistencies on Air Quality & *"residential amenity"* in HA's 1, 3, 5, 11 & the complete absence of any *"residential amenity"* on Air Quality in HA4.

Remember, Policy S8 in the RLDP under *"residential amenity"* simply states the goal to: *"incorporate satisfactory air quality measures"*. The words *"satisfactory", "nationally set standards", "could", "should", "encouraged", "desirable"* are all found within the LAQM used by your officers, both giving rise to what I believe is a failure to go beyond the wide discretion allowed within the LAQM; this is how statements on Air Quality is justified and used by developers.

You may recall my reference to a study in Monmouth which demonstrated PM10 & PM2.5 as being *"continuous sources"* within Monmouth's environment. The delivery of a temporary increase in monitoring around CS0270, whilst welcome, is not sufficient in time, in methodology, nor extensive enough to understand the true nature of traffic emissions in Monmouth; this issue is not confined to the Dixton roundabout – developments have wider implications. I repeat my words from 10/10/24 in that we cannot truly understand the environmental and health issues presented against this proposed development because of a failure in official monitoring methodology and in data, excused via the LAQM, along with the failure to deploy the Precautionary Principle & your Public duties found in the Ella case.

In conclusion, there are several important points. There's a subjective reality that in walking through Monmouth's streets, you can smell & taste the emissions from traffic emissions – that's the canary methodology. Where I ask, is the risk assessment for air quality found under paras 4.30 to 4.32 of the LAQM? Constituents are now driving cars with Portable Environmental Monitoring Systems as standard – your officers have dismissed PEMS to me – your constituents will be asking questions of you soon. The developers have made an application for a *"screening opinion"* under Section 6 of the EIA Regulations; hoping that an EIA will not be required. I respectfully ask that you ensure that an EIA is required, delivered under Section 4 of the Regulations, requiring a particular emphasis on traffic emissions during any pre and post construction phase, remembering of course that this development and

its traffic emissions will have a cumulative effect on Public Health in Monmouth. If ever there was an argument that Monmouth's air quality risks will be exacerbated, then, this is that moment, and we must recognise that CS0270 & other sites will so exacerbate the risks for Monmouth – it is also time to enact the provision found at para 8.3.2 of the RLDP.

Thank you for listening to me.

Annex 5: Photograph of PEMS in-car Technology taken in Chester, England