



## **Carmarthenshire County Council**

### **Environment Act 1995**

### **Air Quality Management**

### **2017 Carmarthen and Llanelli AQMA's Action Plan Report**

**(November 2017)**

**Action Planning Group**

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## 1.0 Purpose of Report

This report presents a summary of the background work that has led to the formation of the Air Quality Action Plan for the towns of Carmarthen and Llanelli, along with a generic set of proposed actions that it is hoped will help to improve air quality generally. This work contributes to the requirements of the Local Air Quality Management (LAQM) process as set out in Part IV of the Environment Act (1995), the Air Quality Strategy for Wales 2007 and the relevant Policy and Technical Guidance documents issued by Defra and Welsh Government. It should be noted that this work has taken due regard of the latest (2017) Policy and guidance updates issued by Welsh Government and the need to reduce air pollution in general and not just concentrating on trying to achieve the Air Quality Objective (AQO) in 'hot spot' areas.

Continued breaches of the AQO for nitrogen dioxide (NO<sub>2</sub>) in the towns of Carmarthen and Llanelli led to Detailed Assessments (DA) being carried out during 2012 which unfortunately failed to identify the extent of the areas of exceedance. Therefore modified DA were performed in 2013 followed by Extended DA which then gave a clear indication of the problem areas and the extent of impacts on those areas. The results of the extensive monitoring confirmed the need to designate AQMA's in both towns. After wide consultation, and approval by full Council, the Orders for the AQMA's were signed and issued on the 2<sup>nd</sup> August 2016.

The Action Plan is a separate document, appended to this report, which has developed from the culmination of the work described in this report. The Action Plan is a 'live' document that will be subject to regular review.

## **2.0 Development of Draft Action Plan**

The Action Plan Group consisted of members from the Llandeilo Action Plan Group along with colleagues from Forward Planning and Regeneration. The Group agreed that the Llandeilo Action Plan work would be progressed by the Group along with dealing with the Carmarthen and Llanelli work.

As the nature of the three AQMA's were slightly different it was acknowledged that membership of the Group may need to include other partners depending on Action Planning in each town and so it was agreed that co-opting members would remain flexible and could be initiated when required.

### **2.1 Action Planning Group Output**

The AP Group performed a 'brain-storming' session to generate a list of potential interventions that may help improve air quality. The list was organised in those that were relevant for Carmarthen and those for Llanelli, and then a list that would be applicable for anywhere. Certain interventions were relevant for both towns. No form of screening was performed in respect of the proposed interventions, irrespective of how feasible or practicable they may be. All proposals will be subject to screening assessment and the outcome may mean that some will not be deliverable.

### **2.2 NO<sub>2</sub> Reduction**

Historically there has been a requirement to identify the reduction needed in NO<sub>2</sub> to achieve the objective level of 40µg/m<sup>3</sup>, as an annual mean. However, latest guidance issued by Welsh Government this year goes further and places a requirement for us to look at reducing pollution levels wherever possible (and not only within designated AQMA's). Rather than fixating on achievement of the Air Quality Objective, the source apportionment work should be used to help inform potential interventions that may result in improvement across the AQMA's and beyond. Source apportionment is where the contribution of each polluting source (e.g. class of vehicle) is

estimated. Traffic counts have already been instigated that will assist with the source apportionment work, the results of which will feed in to the assessment of proposed interventions.

### **2.3 Areas of Concern**

The AQMA boundary map areas for Carmarthen and Llanelli cover a much wider area than the actual areas of exceedance. This is because any interventions aimed at improving the area of exceedance may simply move the problem, or the means to make any improvement requires action over a far greater area than the actual area of exceedance itself.

Figures 1a, 1b and 2 below identify (in blue shading) the actual areas of exceedance for both towns.

Figure 1a – Carmarthen AQMA Area of Exceedence (East)



### Carmarthen AQMA Hot Spot (East)



0 50 100 150m

Graddfa  
Scale  
1:5000

Canol y Map  
Map Centre  
[241809.9,220466.3]

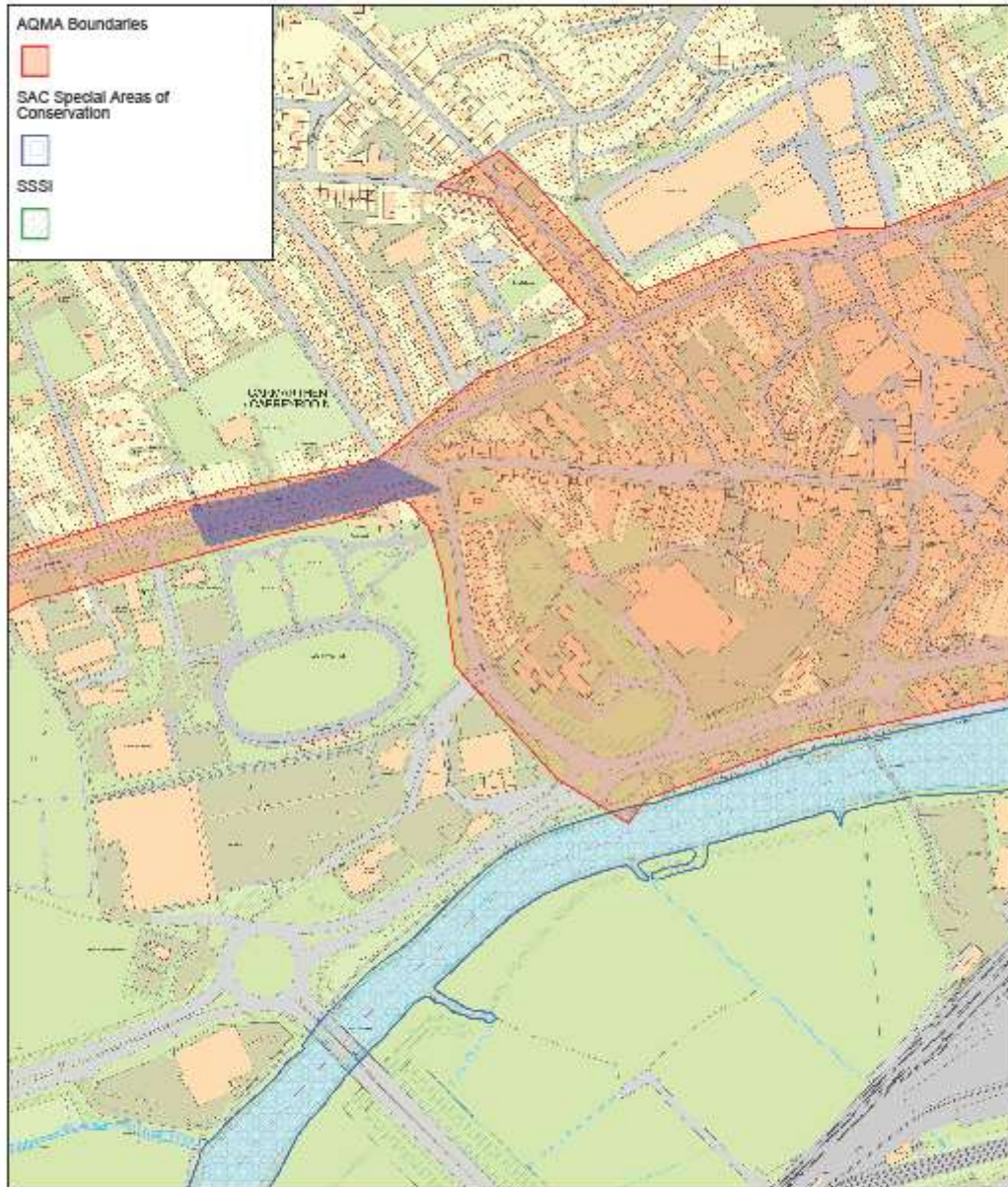
Dyddiad  
Date  
20/07/2017

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Figure 1b – Carmarthen AQMA Area of Exceedence (West)



### Carmarthen AQMA Hot Spot (West)



0 50 100 150m

Graddfa  
Scale  
1:5000

Canol y Map  
Map Centre  
[240785.1, 219956.7]

Dyddiad  
Date  
20/07/2017

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The hot spot areas identified by the blue shaded sections on the maps in Figures 1a and 1b above are small geographical areas with various constraints (such as narrow pavements and buildings close to the highway) that greatly restrict any significant interventions that would contribute towards achieving NO<sub>2</sub> reductions of the scale required. Both lengths of road are gradients that have roundabouts at their lower section and pedestrian crossings at the higher end of road section. The use of alternative routes for a number of the journeys made along these road sections would help improve the situation.

The hot spot area identified by the blue shaded area on the map in Figure 2 below encompasses the bottom of Felinfoel Road meeting Thomas Street and the junction at Gelli Onn. This is a small geographical area with various constraints (such as narrow pavements and buildings close to the highway) along with being the main intersection junction for routes that cross the town from east to west and north to south. The use of alternative routes for a number of the journeys made along these road sections would help improve the situation, along with potentially altering the traffic light sequencing.



Figure 2 – Llanelli AQMA Area of Exceedence



### Llanelli AQMA Hot Spot



0 20 40 60m

Graddfa  
Scale  
1:2500

Canol y Map  
Map Centre  
[250720.9,200729.2]

Dyddiad  
Date  
20/07/2017

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### 3.0 Draft Action Plan Public Consultation

A public consultation was launched on the 7<sup>th</sup> August 2017 in respect of the Draft Action Plan and continued until 29<sup>th</sup> September 2017. Table 1 below shows the list of consultees that were contacted directly in respect of the consultation. The consultation was advertised on the Council website along with notifications provided on social media.

Table 1

<b>Carmarthen and Llanelli Draft Action Plan Consultee List</b>
Welsh Government (Air Section)
Natural Resources Wales
South Wales Trunk Road Agents
Public Health Wales
Carmarthen Town Council
Carmarthen local Councillors
Llanelli Town Council
Llanelli local Councillors
Targeted members of public who have raised air quality concerns or shown interest

The website link to the draft Action Plan and supporting information was live for the duration of the consultation period and was monitored for 'traffic'. The details obtained from the site report identified that there had been 95 unique site visits with a total of 119 page visits. The average duration of time on the page was two minutes and 43 seconds.

There were a total of 11 formal responses to the consultation. These are summarised in Appendix 1.

## **4.0 Review and Monitoring**

### **4.1 Review**

The comments and suggestions received through the consultation have been assessed and, where possible, incorporated in to the Action Plan. The consultation exercise was valuable in teasing out suggestions that had not previously been considered.

The Action Planning Group will remain as an active working group that coordinates and oversees the implementation of the various Action Plan proposals. The data gathered from implementation will be documented and reviewed by the Group to ascertain the benefits gained from each proposal, along with assessing whether there have been negative impacts.

The Action Plans are deemed as 'live' documents that are likely to be subject to change over time and therefore should be reviewed on a regular basis. It is proposed that the review will be carried out as part of the annual reporting requirements to Welsh Government under the LAQM process.

### **4.2 Monitoring**

It is proposed that a newly purchased automatic analyser will be used for action planning work and this will facilitate the use of 'trial periods' that can be used before full implementation of certain proposals. This means that should a trial period for a particular proposal come back with negative impacts, the proposal can either be modified or, if necessary, discounted before full implementation. This method has various benefits, and will indicate whether a particular proposal is likely to work. It will also ensure that public funds are allocated effectively, and are not wasted on fully implementing Action Plan proposals that would result in no improvement to air quality.

Our existing Nitrogen Dioxide Diffusion tube monitoring network will be maintained as this will provide longer term trends to be established without the need to keep the automatic analyser in situ for protracted periods of time.

## **5.0 Carmarthen and Llanelli Action Plan**

The Action Plan has been split in to three sections relating to Carmarthen, Llanelli and then a section for general proposals. No form of screening has been applied at this stage to ensure nothing is discounted without a documented assessment having been performed to determine the feasibility of any proposed intervention. The Plan incorporates new proposed interventions as a result of the public consultation. No priorities have been assigned to the proposals at this stage, but this will be done as part of the Action Plan Group work.

The Action Plan is shown in Appendix 2.

## References

- 2012 Carmarthen Detailed Assessment Report (December 2012) Carms CC
- 2012 Llanelli Detailed Assessment Report (December 2012) Carms CC
- 2014 Carmarthen Extended Detailed Assessment Report (February 2014) Carms CC
- 2014 Llanelli Extended Detailed Assessment Report (February 2014) Carms CC
- 2015 Carmarthen AQMA Boundary Consultation Review and Report (December 2015) Carms CC
- 2015 Llanelli AQMA Boundary Consultation Review and Report (December 2015) Carms CC
- 2016 Progress Report – Carms CC
- 2017 Llanelli and Carmarthen Draft Action Plan Report – Carms CC
- Local air quality management in Wales Policy Guidance (June 2017) Welsh Government

## APPENDIX 1 – Public Consultation Responses

### 1)

Carmarthen area

C1 the current cycle routes in and around town are not used by 'serious' cyclists as they cannot maintain their speed compared to remaining on the road-- local folk probably do use them so cost of expanding the network will need to be considered against other CCC priorities

C6 many polluting buses have very few passengers at certain non-peak times and probably cause more pollution than the few cars that may not be driving into town-- electric buses would be a better solution with maybe smaller buses at off peak times.

C7. We walk down a polluted road (Priory St) very often into town. In principle is good but in practice might not improve health.

I have recently heard on the news that the elimination of speed bumps because of the almost stop start manner of driving / accelerating away would be an improvement to the Nation's air quality

C9. Not sure what bridge scheme is proposed here?

If the slow moving traffic on Lesneven bridge could be speeded up by some major roadworks to allow those travelling West not to be halted by the B & Q roundabout -- this should reduce pollution.

The Morrison main roundabout is a nightmare for travellers with a roundabout with many lanes to negotiate and also traffic lights-- why do we need a roundabout as well as traffic lights-- improved traffic flow here could ease pollution.

Table 3 Generic

A would this mean lorries or diesel vehicles would not be allowed to travel into certain areas of the town? If so this could help significantly.

B how would this differ from A? Unless there was a congestion charge?

G. How would this work? If one is in a queue caused by road works then nothing much that can be done unless there are diversion signs well ahead warning of roadworks

H 20 mph throughout the town can be very slow when traffic is flowing freely-- might be possible to restrict the 20 mph to certain times of the day  
Dummy speed cameras could well help in this regard.

I. Cyclists and pedestrians are not always a good mix as we experienced lately walking into town via the Derwen route when a cyclist was right behind us with no warning (he had no bell).

N. Very early morning bin lorries can be a nuisance to householders but I do see that on certain routes it would be beneficial to reduce hold ups in the town --Priory Street and Spilman street.

Q. How would this be implemented?

S. Does this mean in certain parts of town?

## 2)

### Improve signage.

Possibly improve signage pointing to the M4 at the top of Gelli Onn and anywhere on the ideal route to the M4.

### M4 access.

I believe that the main reason cars and lorries still use Felinfoel Road is to access the M4 at Crosshands.

At times access via Llangennech is virtually impossible with queues extending back as far as the old RN buildings to enter the M4.

Personally this morning I travelled along the coast road to access the M4 at Penllergaer (Gorseinon).

I'm aware that this junction is the responsibility of the Highways Agency but perhaps Carmarthenshire Council can change the road markings to form a roundabout?

Extremely dangerous queues also form to exit the M4 here and on the A4138 (and perhaps cause drivers to travel to Crosshands?). This is obviously caused by the first traffic lights on the A4138. Perhaps a roundabout could be formed here?

### M4 route changes.

(1) Aldi traffic lights.

I think that junction could be improved. It operates at a very slow speed and generally seems to confuse pedestrians. In particular pedestrians jump out in front of cars travelling towards the Parish Church! I've also seen people knocked over here.

All in all I prefer to avoid this junction.

(2) Dafen roundabout.

A very busy junction that doesn't seem to cause many delays but in this area some drivers seem to take this at high speed apparently to avoid delays. I avoid it for this reason.

### Felinfoel Road bypass.

There seems to have been some changes made in the past with the view to constructing a new road from Sandy Bridge up through Pentrepoeth to re-join at Heol Buckley, Felinfoel. At Heol Buckley there seems to be a partially constructed road. I wouldn't really want to switch the pollution to Pentrepoeth valley but I thought I'd mention it.

## 3)

Apologies for the delay in getting back. Fine from my point of view. One further thing mentioned by a colleague here in relation to encouraging cycling was that there aren't facilities to securely store bikes in a lot of the buildings. The price on bikes these days people will want a secure location inside or outside.

#### 4)

I took the opportunity over a few hours on Saturday to canvass or petition fellow residents along the length of Pembrey Road, those that were at home had no hesitation signing, but the general consensus of opinion was it would be of little use as the Council show little interest in positive change and there was a lack of political will to do something that would improve the quality of life of residents hence I copied in the various political representatives. Other issues which came up on the door step which you may wish to share with colleagues, are the width of pavements on the 'north side' of Pembrey Road pedestrians' are in very close proximity to passing lorries, vehicles travelling at high speed, especially in the evening hence a request for speed cameras and the continuing problem of indiscriminate parking by some in the 'north side' rear lane of Pembrey Road some felt whilst the single yellow lines were effective Mon-Friday the prohibition period does not cover the weekend which some irresponsible drivers take advantage of. It is hard to defend single yellow policy when those on the 'south side' of Pembrey Road enjoy double yellow lines in their rear lane but don't suffer from school run mothers blocking our lane whilst they take their children into Pentip School, or the fact the rear lane is used as a short cut by those living further up in the ward. On a lighter note one resident would like some greenery planted which isn't a bad idea if we could have some of the other issues resolved or the poor plants would struggle to grow! I trust this petition is taken seriously and informs the public consultation.

I live on Pembrey Road and the main pollutant without doubt, is heavy goods vehicles travelling both East and West using Pembrey Road/A 484 as an access route. There is an alternative coastal route these vehicles can use but they do not possibly because their sat nav's say otherwise. If they used the coastal route they would save on diesel and not add to traffic congestion within the town. The road itself suffers from heavy traffic damage and given the camber and poor surface water drainage due to too small diameter pipes running into the gulley's (another issue) dirty road spray hitting windows is another problem. The build-up of small carbon deposits on external window sills indicate heavy pollution. I would recommend a tonnage restriction along Pembrey road be included in the action plan, this is a cheap and very effective solution (with the exception of public transport). A speed restriction should also be considered along with speed cameras, vehicle's travel at great speed especially at night. Where heavy traffic pass outside my house the tarmac footpath is very narrow and pedestrians are in very close proximity to passing lorries - this is dangerous. There is no doubt our quality of life is suffering and I trust you can support my recommendation. It is not only residents and passers-by who would benefit but also the children of Pentip School

#### 5)

I have read the above mentioned consultation document and in particular have a vested interest in the area of Sandy Road. I have lived in this area since 1974 and have now some serious concerns regarding the amount of traffic, the type of vehicles and the high pollution levels that are now attributed to this traffic.



I'm sure that you are aware that there are a number of schools and a college in this area which children and teenagers attend on a daily basis. Many of them walk to these establishments via the A484 others travel via bus or car.

Also from Sandy Road roundabout down to Pwll there are a number of garages selling cars, a petrol garage, a tyre garage and a bus depot, there are also a few others which I could mention. They all contribute to the high volume of traffic in some way or another.

This road is not only dangerous through the fumes and pollution that these vehicles spew out, but also due to the amount of traffic that use this road. The new Stradey Park housing estate is already adding pressure to this vastly congested road and it is only partly occupied. Denham Avenue is being used by bus companies and motorists to convey their clients and children to their respective schools which has made this road very dangerous. At the bottom of this road you have a roundabout which is totally unsuitable leading on to the A484, I have no doubt that sooner or later there will be a serious accident there or even worse, a fatality waiting to happen.

In Wales alone 2,000 deaths a year are believed to be caused by Air Pollution. In England, especially the London area, councils are being taken to court by members of the public regarding their medical conditions caused by this pollution. These include Asthma, Cancer and other respiratory ailments, I'm sure it is only a matter of time that this will also happen in Carmarthenshire unless you act soon to reduce these pollution levels.

I have noticed that whilst housing, schools and businesses have all been extended or increased in the Sandy area, over the years, the council have not put the relevant infrastructure in place to go with it.

I'm sure you are also aware over the last seventeen years or so relevant people have stated that a BY PASS was needed to be built as they could see what the future would bring. I would agree that there is no easy fix to this issue, however, a BY PASS is long overdue for this area, and will go a long way to solving some of these issues.

Can you pass these comments on please to the Action Plan Committee.

## **6)**

The Table 3 has some excellent ideas.

I would like to see added: Ban children from being driven to school in private vehicles. They can walk, cycle or use the buses. (exceptions can be made for children with special needs)

C1. Improving the cycle routes will only work if the cyclists will use them. I notice that they are reluctant to use the cycle paths next to the roads and prefer to hold up the traffic creating more pollution.

C2. Media/advertising is probably not going to be enough to get vehicles onto the Carmarthen bypass. There are too many hold ups.

Is the biggest issue the through traffic on the A40? Why can't all these trucks that travel the length of the UK from ferry to ferry, [do not add to the local economy but do damage and clog up our roads], be obliged to use the railway which runs to most of our ports in Wales to the Chunnel.

Maybe we would not have to build any more expensive roads. It might even be financially worthwhile putting on subsidised trains. My family would love a better train service.

## 7)

I write in relation to the current consultation you have on the air quality issues in the Llanelli area. As a resident living in Park Howard Avenue, I regularly drive down Thomas Street and West End and experience the traffic jams that probably contribute to poor air quality in the area.

Driving down Thomas Street (less than half a mile) can take up to half an hour at times (such as during school runs etc.), and the main problem appears to be caused by people turning right into Old Road (alongside Thomas Arms). They have to wait to turn as there are cars driving up from town, this then causes a tailback up Thomas Street.

One suggestion could be the introduction of a roundabout where the current bus shelter is outside Jenkins, as this may aid with traffic flow. I think the problem will never be resolved properly as there are too many cars on the road, and whatever methods of control are adopted will only last so long.

An additional problem is caused by cars parking in areas they should not, such as outside the doctor surgery on Old Road alongside the Thomas Arms, whilst there are yellow lines present they are often ignored. This again causes blockages with traffic flow as cars travelling up and down Old Road cannot move freely.

Cars trying to pull out of Old Road onto Thomas Street (outside front of Thomas Arms) can sometimes have to wait long lengths of time given the volume of backed up traffic, all with idling engines contributing to air pollution. A roundabout as mentioned above may help with this situation.

In relation to the road leading from West End into town, I believe a major problem at this point is there is not enough room for traffic to filter left to drive up Gelli On. The traffic lights allowing traffic to drive straight on towards the library only turn green for a short period, and three or four cars later all traffic from West End is blocked again as they cannot filter left. Allowing the lights to stay green longer for traffic going straight could help.

Another problem that adds to the situation is cars parking along the main roads into the town centre. An example being cars parked along the side of New Road, whilst the road has been widened to try and keep 2 lanes, one bus or lorry driving along causes the road to be blocked with cars. This also causes cars to use side streets to try and avoid the road, such as Stradey Park Avenue and Mansel Street. Another example of this is Station Road, leading up to the Train Station gates from New Dock Road, and after the gates up to town. Cars parked along the road on the approach limits the road to one lane, causing tailbacks, and I have even witnessed cars having to stop on the tracks as cars cannot pass due to other cars parked opposite the Apple Tree Inn (this does have yellow lines but are often ignored).

Not sure if this information is of any help. If you would like any further information please let me know.

## 8)

The proposals and Action Plan were very much welcomed, please note the below comments/suggestions:

1. Park & Ride - proposals to improve the current situation were welcomed, particularly moving the current facility from Nantyci to a location closer to Carmarthen town and especially Glangwili Hospital. The current site at Dolgwili being used by Balfour Beatty/Western Power for the Brechfa Wind Farm power connection was suggested as appropriate and worthy of further consideration.
2. There is a real need for additional battery car charging points across the town, especially in view of recent national and international statements being made by governments and car manufacturers about reducing the number of petrol and diesel vehicles. This has been reported to the County Council previously by the Town Council's Environmental Working Group but there seems to have been no progress made.
3. Consider street bicycle hiring schemes similar to that operated in London and elsewhere ('Boris's Bikes')
4. Consider introducing free use of bicycles restored by young offenders serving community service sentences.
5. Consider the introduction of 'dummy' speed bumps whereby images are painted on road surfaces to give the appearance that speed bumps are in place.
6. Consider the routine/programmed pedestrianisation of certain designated streets at different days or times of the year to reduce motor vehicular traffic and to encourage people to walk or cycle.
7. Extend the operating hours of the Tesco Shopper's bus - at the moment it ends daily at 3.15pm which is considered to be too early.

C9 in your action plan refers to 'bridge schemes' - what exactly are these?

9)

Thank you for your email regarding the public consultation. I would be grateful if you could clarify a couple of issues for me.

It is stated in the Draft Action Plan Report that this work has taken due regard of the latest (2017) Policy and guidance updates issued by the Welsh Government and the need to reduce air pollution in general and not just concentrating on trying to achieve the Air Quality Objective (AQO) in "hot spot" areas.

The Annex A tables with the new Policy guidance discloses National air quality objectives for Particles (PM10 and PM2.5) (gravimetric). At the beginning of July, the front of our house was painted and it has been alarming to see how quickly a thick layer of what appears to be black soot has formed at the base of the front. Will the council be taking steps in the future to measure and monitor the levels of Particulate matter and will it be a consideration in respect of the Action Plan, since it clearly as well as the levels of nitrogen dioxide has an adverse effect on our health?

In response to a Freedom of Information request, there is a table found on the Welsh Government website issued by the Department of Environment and Sustainable Development, which provides the names and addresses of all primary and secondary schools in Wales located close to or within 150 metres of roads modelled as exceeding the nitrogen dioxide limit using the Pollution Climate Model 2015. It further states that this information has been compiled for Compliance Assessment reporting to the European Commission which does not include the requirement to assess air quality in or around schools. The information includes modelled predicted levels of NO<sub>2</sub> at the roadside only. There are no schools within the Carmarthenshire area listed on the table.

Box 4.3 of the new Policy guidance states: "In working towards the well-being of future generations, Local Authorities should give special consideration to the long-term risks posed to babies and children by exposure to air pollution, whether in their homes, in their school or nursery, or travelling between the two." Old Road Community Primary School, as well as running alongside Old Road, is within 150 metres of Felinfoel Road. The children cross both roads on a daily basis during term time. Has any special consideration been given to the location of the school when drafting the Action Plan?

A traffic count has recently been carried out on Old Road and I would be grateful if you could send on to me the results of that count when they become available.

Any information or clarification that you can provide with regard to the above matters will be much appreciated.

Followed by

Thank you for your email. You have previously stated that the data obtained from the traffic count would help towards assessing Action Plan proposals and I was grateful for the opportunity to discuss with you last Friday the results that you were finally able to obtain for Old Road.

The traffic count carried out disclosed that during one week in July a total of 34,120

vehicles used Old Road of which 30,786 (90%) were northbound. The 5 day average is shown as 5343. One of the proposals in the draft Action Plan is that you assess the impact of closing the turning junction from Felinfoel Road to Old Road. As discussed, there is clearly a need for a further traffic count to determine how many vehicles are turning from Gelli Onn to travel northbound up Old Road to be able to assess the overall impact.

As stated in the Plan, the hot spot area encompasses the bottom of Felinfoel Road meeting Thomas Street and the junction at Gelli Onn. Old Road is not an arterial road or high-capacity urban road. It is a residential street, which has been used as a rat run as a direct consequence of the Gelli Onn redevelopment and the closure of Bridge Street in 2008. The figures from the latest traffic count are consistent with the figures disclosed in one that was carried out in May 2012, which showed that 36,963 vehicles used Old Road of which 33,026 (89%) travelled northbound.

The Council would have known, or should have known, that a consequence of the redevelopment of the Gelli Onn junction would have been the use of Old Road as a rat run and have been fully aware of the extent of the problem from the previous traffic counts. Yet no action was ever taken to monitor the levels of NO<sub>2</sub> in Old Road, notwithstanding its proximity to Felinfoel Road, until I requested that a diffusion tube be placed in the street after I met with you and Alun Rees at the start of this year.

The Policy Guidance issued by the Welsh Government in June of this year stated that local authorities should give special consideration to the long-term risks posed to children by exposure to air pollution, whether in their homes, in their school or travelling between the two, and I have previously raised the issue with you about Old Road Community Primary School being less than 150 metres from Felinfoel Road. The school is located alongside Old Road and the monthly readings since February of this year show for a residential street high levels of NO<sub>2</sub>. There is an additional risk factor to the children from the failure of the vehicles using Old Road to adhere to speed restrictions, which is also disclosed by the traffic count. In 2015, it was reported in the Llanelli Star that 179 motorists had been caught speeding outside the school. The article appeared on 11 September 2015.

I would therefore ask that as part of the Action Plan that you would consider making the stretch of road from the bottom of Old Road at the Thomas Arms to the turning into the car park of the Llanelli Bowls as one-way to be used only by southbound traffic. That would prevent the continued use of Old Road as a rat run by the traffic turning from Felinfoel Road or coming up from Gelli Onn. Again, I can only stress that Old Road is not an arterial road or thoroughfare. It is a residential street and the benefits from restricting the northbound traffic, particularly from the point of view of the health and safety of the children as well as the residents of the street from the reductions in the levels of NO<sub>2</sub> and particulate matter, are clear.

You did state when we met that a new indicative air quality monitoring pad, an AQ mesh, is to be installed in Felinfoel Road to measure the particulate matter as well as the levels of NO<sub>2</sub>. I would be grateful if you could let me know when that equipment is in place.

## 10)

### Joint submission to Carmarthenshire County Council's Air Quality Action Plan Consultation

Llanelli has worryingly high levels of air pollution and, given that this is the cause of over 50,000 premature deaths (across the UK) each year, it is welcome that the Carmarthenshire Council is taking action to address it.

In the long term, exposure to air pollution harms both our heart and lungs and is particularly detrimental to children. In the short term, harmful levels of Nitrogen Dioxide – such as those identified around both Sandy Road and Felinfoel Road – compound breathing issues for those with pre-existing conditions and can trigger increased hospital admissions. On average, air pollution is estimated to cost our National Health Service upwards of £20billion a year.

However, whilst there are some welcome initiatives proposed in the strategy - such as a new 20 mph zone in the town centre, and measures to improve park and ride provision - the strategy as it stands is short-sighted and we ultimately believe the entire approach needs to be revisited.

Aside from the fact that, as an action plan, there are remarkably few actions (instead the strategy outlines areas of exploration needed before actions are taken), the primary issue is that the focus of the vast majority of initiatives set out remains on diverting traffic, rather than reducing it. This will achieve little but to kick the issue into the long grass, delaying the impact perhaps long enough that it becomes a future generation's problems, not ours. The interventions proposed won't tackle the problem, they will simply disseminate it – and whilst they might ensure no one neighbourhood's air breaches regulations, they'll achieve this by making everyone's air that little bit more harmful to breathe.

Promoting modal shift away from car travel is widely acknowledged as one of the most effective ways of reducing emissions and improving air quality. Two thirds of our car trips are less than five miles long, and one in ten car journeys are for distances of under a mile. With a number of small changes, these are journeys that are easily replaced by walking, cycling and public transport. The policy measures that would achieve this, however, are only listed under the section titled 'Generic Draft Air Quality Improvement Proposals', which are specific in neither their location nor their time of implementation.

Air Quality Strategies are intended to encourage local authorities to set out policy options that would improve air quality both today, and into the long term - as a means of not only providing direct benefits to public health, but to improve the quality of life for communities, and to help protect the environment. This action plan won't achieve this.

**Specific responses to actions proposed:**

Assess traffic light sequencing for Thomas Street /Gelli Onn junction	Assessing traffic light sequencing may help to reduce levels of idling traffic, but it won't reduce overall traffic volume.
Consider traffic survey for Llangennech / Dafen / Thomas Street to establish why that route is used.	A sensible suggestion, but it should be expanded to consider what alternative modes of transport (buses, walking, cycling) could help alleviate the problem, and how modal shift could be encouraged.
Considering using signage to alert drivers they are entering the AQMA (possibly suggest alternative routes).	If alternative modes of transport are not available, this will only (at best) divert traffic.
Utilise media resources to publicise the use of the Coast road to reduce traffic volumes travelling through the town unnecessarily.	Again, this will only divert traffic and will worsen air quality for communities in Glanymor and Llwynhendy. It also contradicts proposals for the Delta Lakes development to be part of a 'clean air zone'.
Assess the impact of introducing a 20mph speed limit in the town (greater use of bypass, improve road safety, less congestion, encourage walking, improve health).	20mph zones have been shown to increase levels of walking and cycling as pedestrians and cyclists feel safer navigating streets – as such, this should be encouraged. However, 20mph zones without other urban design interventions are unlikely to be effective - these interventions must be considered in tandem.
Review the Park and Ride provision for the town. Work with partners to assess delivery of a joint service for multiple sites.	Improving the park and ride provision could help reduce traffic volumes and should therefore be prioritised.
Assess the potential of re-opening Bridge Street.	Whilst this may induce better traffic flows, it will bring traffic pollution to the doorstep of Llanelly House and our library and may make these popular destinations less attractive to visitors.
Assess the potential for creating a bypass for Sandy Road.	Costing in the region of £40-£50m, this is by far the most expensive proposal made. And with a Southerly wind, would potentially have little impact (given that particulates would still be carried towards Sandy Road). More than this, evidence shows that if you build extra road capacity, it only incentivises people to use cars more often, further worsening air quality.

Assess the footpath/cycle path connectivity for the Sandy Road area.	A whole network of walking and cycling routes is needed across the constituency, not just one isolated area. And considerations need to be given to where road space can be reallocated.
Assess any impacts / opportunities from the Graig College development.	Without further detail on what the impacts / opportunities might be, it is difficult to comment on this proposal.
Assess any opportunities from the Wellbeing Village development (e.g. electric vehicle charging points etc).	Electric vehicles may reduce air pollution, but they are not a solution to tackling climate change. The electricity that powers these vehicles still needs to be produced, and all too often this is done through fossil fuels.
Assess potential impact from the development of Parc Howard	The proposals to introduce a two-storey car park must be revisited. Building more capacity to facilitate car use will only encourage more traffic to an area of town already struggling with poor air quality.
Assess impact of closing the turning junction from Felinfoel Road to Old Road.	
Review and assess HGV timings to businesses in and around the town centre.	Again, whilst this might improve air quality during peak journey times, it will do little to reduce overall pollution levels if the same volume of traffic remains.

## 11)

I have set out various sections that I feel are all equally important and vital to the control and reduction of poor air quality that is constant in Sandy Road and is progressively deteriorating to such an extent that only a By-Pass will effectively eliminate a situation where the Health Safety Standard set at 40 ug/m3 is constantly being breached.

### **(1) Sandy Road By-Pass**

This has been described as the “**Missing Link**” for the A484 and because of the short-sightedness of Carmarthenshire County Council, has created “**a monster**” that even the best pollution prevention people will find impossible to eradicate.

A feasible route has been identified from the B4304 near to the “cycle bridge” to the Eisteddfod Fields Car Park and out onto the A484 at the existing roundabout adjacent to the Stradey Patio Centre at Coleg Sir Gar.



A fallacy has been created that the Millennium Commission would demand a return of its £30 million in grants if this route was adopted, nothing can be further from the truth as an officer for the Commission explained that if the Council presented a bona fide case, then the Commission would not want a penny in compensation. *(Letter available on request)*

Talking to a Professor of Pontypridd University, an eminent expert in the building of infrastructure in Wales estimated the cost at £6.5 million per mile and that is just about the distance needed to complete this improvement to the congestion and pollution sufferings of the people of Sandy Road.

Grants have to be forthcoming from the Welsh Assembly Government to facilitate this as **“Phase 1”** to complete this section of the **“Missing Link”** which inhibits free flow of commercial traffic harming the prospects of enhancing trade and employment over the only route, west out of Llanelli.

A Pwll By-Pass is not as urgent as one for Sandy Road with the only area of pollution concern being Bassett Terrace, the rest of Pwll does not contain a **“double terraced”** row of housing effect, but even this in Bassett Terrace is nowhere near as acute as Sandy Road.

Once the benefits of a Sandy Road By-Pass are realised then a phase 2 grant could in the future be sought.

### ***(2) One way System to immediately reduce pollution buy 50%.***

The construction of a 400 metre road extension at the west end of Sandpiper Road running behind Sandy Road and exiting at the Stradey Patio Centre roundabout would immediately reduction the poor air pollution at Sandy Road by 50%.

All westbound traffic would travel along Sandpiper Road and all eastbound traffic along Sandy Road, there would be objections, but when have the Council taken notice when they ignore the massive objections of the residents of Sandy Road.

There seems to be a NIMBY approach that is listened to over such pollution easing schemes as there will be in Section 4 below.

In the interim other measures to consider:-

### ***(3) Impracticality of a Park & Ride System for Sandy Road.***

The construction of a **“Park & Ride”** system or even a **“Car Sharing”** scheme to cut down on traffic flows would never work because there is no feasible area for cars to park and the blank refusal for people to get on board with it.

To build a **“Car Park”** between Burry Port and Pwll on slopping private land either side of the A484 would be both impractical and expensive to purchase (more beneficial to build the **“By-Pass”** phase 1)

To develop **“Car Parking”** on the existing Eisteddfod Fields and bus into Llanelli from there would be a total waste of time as motorists would not use it because the distance to town is minimal and the disruptive nature of the system would cause chaos and congestion at the Stradey Patio Centre

roundabout and the queuing for the buses would test the “**patience of a saint**”.

Sometime ago an idiotic suggestion coming out of Carmarthenshire County Council’s Highways Department was to cycle into town to reduce the traffic numbers using the then new section of the National Cycle Network from Burry Port to Llanelli.

If we had the reliable good weather of California all year round, people still would not consider it as cycling is a hobby/sport not a means of going to work over this distance, we are NOT Dutch.

How would, “**would be cyclist enthusiasts**” cope with cycling home in the dark (no lighting on the path at all) and pouring down with rain, enough said.

So coming back to the real world, our Summers are poor and other times of the year would be ridiculous to even consider cycling, let alone there are no cycle parking facilities in Llanelli whatsoever, more cost for no rewards.

#### ***(4) Stradey Park Avenue / Traveller’s Lane.***

With the further development of the Stradey Park Development which will create added pressure to the Maes-y-Coed and Denham Avenue junctions with Sandy Road, it has to be a consideration to open up an entrance into the eastern part of the development site from Stradey Park Avenue or create a route into the development from Sandy Bridge Roundabout by widening the existing lane that runs parallel to the “**Traveller’s Caravan Site**”

Arguments on crossing the NCN (National Cycle Network) in this area must be weight up against the amount of cyclists that use the route (less than 30 an hour) and the easing slightly of the expected added pressure on Sandy Road and the Iscoed Housing Estate with the eastern development being completed.

This network route already has two barriers to stop cyclists from crossing the existing road and allows traffic to traverse into the Llanelli Wanderers Car Park anyway, so common sense must prevail.

It also should be considered to create a road link from the Llanelli Wanderers Car Park to the Llanelli Cricket Club to be used only at school opening and closing times (by school traffic only) as the pressure and danger at these times on Denham Avenue and consequently onto Iscoed Road, Maes-y-Coed and Sandy Road is horrendous.

It should be the responsibility of an employee of Ysgol Cymraig Ffwrnes to open and close the existing barrier promptly.

#### ***(5) Abuse of Sandy Road Lane at peak times.***

Sandy Road lane (a private lane) is being used extensively as a “**rat run**” by impatient motorists during times of peak pressure and the volume and speeds of these vehicles is causing great concern to residents and their children.

The lane has a very poor surface, but this does not inhibit motorists from using and abusing it.

The last thing the residents, especially children expect is a speeding car coming down the lane at “breakneck speed” as a short cut to Ysgol Gyfun Stradey to avoid the traffic congestion as well as at other times of the day.

***(6) Excessive Speeding up and down Maes-y-Coed.***

Maes-y-Coed has a “**20 mph**” limit on it, but that does not register with motorists (mainly from the Stradey Park Development) from using it as a “**zero to sixty**” sprint challenge.

The off centre roundabout at its most northern most point causes danger from vehicles travelling in and easterly direction to it from Iscoed Road when many vehicles traverse straight over it as if it does not exist, and the situation will be exasperated even further with the completion of the East Section of the development.

Measures need to be implemented now to avert collisions, which will be added to by the new Co-op Store and the 3 new outlet shops soon to be opened.

Papering over the cracks and introducing a “**Cosmetic Exercise Response**” such as speed bumps to slow traffic down on a “trunk road – A Class” will only prolong a vehicles’ time spent in Sandy Road, increase idling whilst pumping out more pollution, or the introduction of “speed warning signs” which divert motorists concentration of what is happening on the road ahead simply isn’t on.

This is of a serious health concern on a problem that is not going to go away and is only going to get worse.

Please digest my concerns and produce the only feasible and sensible answer of a Sandy Road Phase 1 By-Pass.

## APPENDIX 2 – Carmarthen and Llanelli Action Plan

Table 1 – Carmarthen Action Plan Proposals

Proposal No.	Proposal Description	Predicted Reduction in NO <sub>2</sub> (µg/m <sup>3</sup> )	Estimated Cost	Lead	Consequential Effects
C1	Improve cycle routes in and around the town.				
C2	Utilise media resources to publicise the use of the Carmarthen by-pass to reduce traffic volumes travelling through the town unnecessarily.				
C3	Work with the Local Health Board and other partners to assess car parking issues at Glangwili Hospital.				
C4	Consider using signage to alert drivers they are entering the AQMA (possibly suggest alternative routes).				
C5	Assess the positive / negative impacts of the Western Link once opened.				
C6	Review the Park & Ride provision for the town. Work with partners to assess delivery of a joint service for multiple sites.				
C7	Assess the impact of introducing a 20mph speed limit in the town. (greater use of by-pass, improve road safety, less congestion, encourage walking, improve health)(possibly part time 20mph limit)				
C8	Provide greater support for car sharing / dedicated car parks (possibly involve supermarkets)				

C9	Alleviate traffic congestion on Llansteffan Road/Johnstown with a bridge scheme.				
C10	Introduce electric/low emission buses, and smaller buses at off-peak times.				
C11	Assess feasibility of introducing bike hire scheme for the town.				
C12	Assess use of 'dummy' speed bumps painted on roads.				
C13	Assess part time pedestrianisation of various streets across the town.				
C14	Discuss extending operating hours of Tesco Shoppers bus with the company.				

Table 2 – Llanelli Initial Draft Action Plan Proposals

Proposal No.	Proposal Description	Predicted Reduction in NO <sub>2</sub> (µg/m <sup>3</sup> )	Estimated Cost	Lead	Consequential Effects
L1	Assess traffic light sequencing for Thomas Street/Gelli Onn junction.				
L2	Consider traffic survey for Llangennech / Dafen / Thomas Street to establish why that route is used.				
L3	Consider using signage to alert drivers they are entering the AQMA (possibly suggest alternative routes).				
L4	Utilise media resources to publicise the use of the Coast road to reduce traffic volumes travelling through the town unnecessarily.				
L5	Assess the impact of introducing a 20mph speed limit in the town. (greater use of by-pass, improve road safety, less congestion, encourage walking, improve health)(Possibly part time 20mph limit)				
L6	Review the Park & Ride provision for the town. Work with partners to assess delivery of a joint service for multiple sites.				
L7	Assess the potential of re-opening Bridge Street.				
L8	Assess the potential for creating a by-pass for Sandy Road.				
L9	Assess the footpath / cycle path connectivity for the Sandy Road area. (Pembrey Road footpath width).				
L10	Assess any impacts / opportunities from the Craig College development.				

L11	Assess any opportunities from the Wellbeing Village development (e.g. electric vehicle charging points etc.)				
L12	Assess potential impact from the development of Parc Howard.				
L13	Assess impact of closing the turning junction from Felinfoel Road to Old Road.				
L14	Review and assess HGV delivery timings to businesses in and around the town centre.				
L15	Review/improve signage to M4 (link to L3), identify preferred routes through town.				
L16	Assess parking issues in and around Pentip School.				
L17	Assess impact of weight and speed restriction on Pembrey Road.				
L18	Assess feasibility of creating roundabout at Felinfoel/Thomas Street/Old Road junction.				
L19	Assess feasibility of creating a one-way section of old Road between Thomas Arms and Bowls Club. (Link to L13)				

Table 3 – General Air Quality Improvement Proposals

Proposal No.	Proposal Description	Predicted Reduction in NO <sub>2</sub> (µg/m <sup>3</sup> )	Estimated Cost	Lead	Consequential Effects
A	Consider implications of introducing Low Emission Zones.				
B	Consider implications of introducing Congestion Zones.				
C	Consider implications of introducing Taxi Idling Ban.				
D	Consider implications of introducing Idling Ban outside of schools etc.				
E	Develop Supplementary Planning Guidance (e.g. provision of EV Charging points (– what criteria?).				
F	Engagement with SAT NAV providers to highlight AQMA's (possibly via Welsh Air Quality Forum).				
G	Set up messaging system that alerts of road works that may increase pollution levels over short periods.				
H	Introduce dummy speed cameras to aid traffic calming. (Possibly part time live on rotational basis?)				
I	Consider shared use footpaths. (with markings?)				
J	Advertise cycle paths.				
K	Advertise offices that have facilities for cyclists. (Increase number of offices/buildings providing cycle safe storage)				
L	Produce and distribute car stickers with				



	messages (e.g. – turn engine off when parked/idling, slow down, consider air quality, stay back from car in front).				
M	Check tourist route maps / websites for advised routes (avoid AQMA's where relevant)				
N	Review timings of bin collections & road sweeping				
O	Consider implications of making towns and villages vehicle free.				
P	Establish communications network with haulage contractors to improve service delivery and minimise impact on AQ.				
Q	Consider reward scheme for people who rarely use cars or for those that walk/cycle frequently.				
R	Look at potential for retrofitting buses / coaches to gas fuel.				
S	Consider removal of diesel engine vehicles.				
T	Enhance walking routes.				
U	Improve access to M4 through Llangennech area.				
V	Look for opportunities to introduce green infrastructure or urban planting schemes.				
W	Discuss with WG barriers / opportunities to transfer road freight from ferries to rail freight.				
X	Liaise with 'Car Club' facilitators for opportunities to introduce across the County.				