## CHIDEOCK PARISH COUNCIL

## Chideock@dorset-aptc.gov.uk

Chair: Cllr Vanessa Glenn, 6 Winniford Close, Chideock, DT6 6SA 01 297 480810

Clerk: Miss Sal Robinson, 60 North Allington, Bridport, DT6 5DY 01 308 426327

## 7 August 2019

Re: Chideock village (Dorset), high levels of pollution and request for the commissioning of a more accurate air quality monitoring system - the Zephyr system.

Chideock Parish Council represents a village on the A35 which sits within a distinct geological topography. The steep sided valley contributes to pollution levels being high, especially in the West on Chideock hill. Currently, Dorset Council has in place a system of diffusion tubes, but these do not measure all of the air pollutants; are not sufficiently accurate to give definitive readings; can be tampered with and are "old" technology.

For some time, the Parish Council has requested, as part of Dorset Council's public health and pollution control responsibility, that, given the problems with the quality of the information being provided by the diffusion tubes, they should be replaced with the Zephyr system. This system fully records all aspects of air pollution including NO<sub>2</sub> and O<sub>3</sub>, temperature and humidity, and can measure PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> and CO<sub>2</sub>. Data is automatically returned via a mobile phone network to the manufacturer's server where it can be accessed by the user on a daily basis.

Why is this additional information important?

Apart from recognising the levels of  $NO_2$  which are attributed to vehicle exhausts, the village appears to suffer from excessive fumes from brake dust and burning brakes which lead to additional toxic air pollutants - particulate matter or PM. From the point of the downwards slope of Chideock Hill through the speed camera and up to the shop in the middle of the village, the houses both on the main road and on side roads can be engulfed by fumes .This pollution is just as much an issue as  $NO_2$  but as yet remains unrecorded. There is significant impact upon both individuals and businesses, many of which are bed and breakfast establishments.

The main contributors to these emissions are large vehicles such as HGVs and other types such as caravans, or trailers. Essentially, this is either because these vehicles are braking late due to the speed camera or because they are overweight. In this latter respect, the HGVs even when travelling at low speed emit these fumes because they are overweight, this puts a strain on their brakes and the tyres also "burn".

On this basis, the Parish Council strongly urges Dorset Council to give serious and urgent consideration to replace the current diffusion tubes with the Zephyr system.

Chideock Parish Council looks forward to hearing from you.

Yours sincerely

Sal Robinson (Miss), Chideock Parish Clerk

To: Sam Crowe, Dorset Council Interim Director for Public Health
Matt Prosser, Dorset Council Chief Executive
John Hellgren, Dorset Council Executive Director of Place
Cllr Spencer Flower, Leader of Dorset Council
Cllr Ray Bryan, Dorset Councillor with Highways, Travel & Environment portfolio
Cllr Pauline Batstone, Dorset Council Chairman

Cc: Cllr Simon Christopher, Ward Member for Marshwood Vale Sir Oliver Letwin MP Theresa Villiers MP, Secretary of State for Environment, Food and Rural Affairs Coralie McGown, Dorset Council Environmental Health Kerry Pitt-Kerby, Dorset Council Environmental Health



## **Environmental Protection**

South Walks House, South Walks Road, Dorchester, Dorset DT1 1UZ

① 01305 251010

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Date: 02/09/2019

Officer: Kerry Pitt-Kerby

① 01258 484311

kerry.pitt-kerby@dorsetcouncil.gov.uk

Miss S Robinson 60 North Allington Bridport Dorset DT6 5DY

Dear Miss Robinson.

Environment Act 1995 Air Quality monitoring – Chideock

Thank you for the letter of the 7th August 2019 from Chideock Parish Council. I apologise for the delay in the response - this is a difficult time of year to facilitate responses from different directorates within the council due to annual leave.

Chideock Parish Council have requested that Dorset Council replace the diffusion tubes located within the Air Quality Management Area ('AQMA') with a small sensor air quality monitoring system.

You may recall that the council has previously made an application to Defra for a grant to purchase similar equipment (in addition to the diffusion tube monitoring programme) but unfortunately that application was unsuccessful.

Small sensor air quality monitoring systems do still require the same co-location and adjustment calculations that diffusion tubes do. The advantage of these systems is that they are able to provide almost 'real time' results on a number of pollutants, depending upon the individual sensors purchased. As you will know, diffusion tubes are only able to provide results for one pollutant, over a period of 4-5 weeks. We already understand that there is an exceedance of the air quality objective for  $NO_2$ , so to monitor for that pollutant using this method would not provide additional value.

If this equipment was installed there would not be any benefit to the existing AQMA, which is currently being evaluated by Highways England. Of the additional parameters which could be added onto the monitors, only particulates could be of interest. But owing to the significant number of components of particulate matter which might be captured, (i.e. in addition to the organic carbon from traffic sources, these include agricultural dusts, products of domestic burning, sea salt, for example) and its transboundary nature, the exact source of captured material could be difficult to identify. In order to overcome this, additional monitoring and laboratory analysis would then be required, followed by expert evaluation of the scientific results.

Exposure to particulates is included in Public Health England's 'Public Health Outcomes Framework'. You will no doubt be aware that our colleagues at Public Health Dorset are undertaking a study of population exposure to particulate matter across Bournemouth, Dorset and Poole.

The objective of this project is to establish what steps can be taken across the study area to reduce the impact of exposure to particulate matter on the population. To achieve this, the study is focussing on

understanding population exposure to background levels of air pollution, not roadside locations. The study area includes both rural and urban sites to provide broad geographical coverage and include vulnerable populations.

Highways England is undertaking a number of more accurate monitoring exercises using a mobile monitoring station in association with the 30mph trial. Once these exercises have been undertaken, the results may be an excellent baseline to use with regards to particulate matter.

Local authorities need to consider the most appropriate monitoring programme according the resources available to them. At this time the Environmental Protection Service does not have the budget to purchase additional equipment such as this, or the resources to manage them. However, given the other activities I have referred to above, I am confident that there will be adequate data available to the authorities to consider.

Yours sincerely

Kerry Pitt-Kerby

Environmental Health Manager - Environmental Protection

----- Forwarded Message ------

Subject: Public Health Dorset study of pollution exposure to particulate matter

**Date:**Sat, 21 Sep 2019 10:19:46 +0100

From: Chideock Parish Clerk < chideock@dorset-aptc.gov.uk>

To: CC:

Dear Mr Pitt-Kerby

Thank you for your response on the use of Zephyr monitors, dated 2 September 2019.

Chideock Parish Council has no knowledge of the Public Health Dorset Study on pollution exposure to particulate matter, which seems a curious omission as Chideock is one of the two AQMAs in the Dorset Council area.

Please provide the Parish Council with further information on the this study as soon as possible; for example the locations being studied, how the locations were determined and when the evaluation report will be available.

I look forward to hearing from you.

Sal Robinson Chideock Parish Clerk Subject:RE: Public Health Dorset study of pollution exposure to particulate matter

**Date:**Mon, 23 Sep 2019 06:42:14 +0000

From:

To:Chideock Parish Clerk <chideock@dorset-aptc.gov.uk>

CC:

Ms Robinson

I shall arrange for information to be made available to CPC as soon as it is published.

Mr Kerry Pitt-Kerby Environmental Health Manager (Environmental Protection) Environmental Health Dorset Council