

Disley Parish Council

Air Quality

By

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Introduction

- **Points to be covered:**
 - **Background to Air Quality**
 - **Air Quality Objectives**
 - **Air Quality in Cheshire East**
 - **Air Quality Monitoring in Cheshire East**
 - **Monitoring in Disley**
 - **Air Quality Action Plan**
 - **Questions**

Background

History

- The industrial revolution of the 18th/19th century
- Changed significantly from the smogs, which could be seen to pollutants which are no longer visible.
- Clean Air Act 1956
- International agreements through to EU and UK legislations and limits.

Background

How is Air Pollution Controlled?

- **Clean Air Act 1993**
 - Dark smoke from bonfires
 - Dark smoke from Chimneys
 - Smoke Control Areas
 - Cable Burning

- **Environmental Protection Act 1990**
 - **Statutory Nuisance**
 - Smoke
 - Dust

Background

How is Air Pollution Controlled?

➤ **Pollution Prevention & Control**

➤ **Permitting of Industrial Processes**

- Across approximately 60 different industrial sectors
- Emissions are controlled by a Permit which sets out a range of conditions.
- CE has over 120 regulated processes

➤ **Planning**

- Air quality is a material consideration in all planning applications.
- Conditions can be attached to control the impact of the site e.g. EV Points

Background

Main AQ Requirements

- **The Environment Act 1995- makes it obligatory for all local authorities to regularly review and assess Air Quality within their Borough**
- **Reporting Requirements**
- **Air Quality and why it is important to monitor**
- **Air Quality Objectives**

Air Quality Objectives

The current air quality objectives in England are as follows:

Pollutant	Objective	Averaging Period
Nitrogen Dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1 hour mean
	40 µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50 µg/m ³ not to be exceeded more than 35 times a year	24 hour mean
	40 µg/m ³	Annual Mean
Particulate Matter (PM _{2.5})	Work towards reducing emissions/concentrations of fine particulate matter (PM _{2.5})	Annual Mean
Sulphur Dioxide (SO ₂)	266 µg/m ³ not to be exceeded more than 35 times a year	15 minute mean
	350 µg/m ³ not to be exceeded more than 24 times a year	1 hour mean
	125 µg/m ³ not to be exceeded more than 3 times a year	24 hour mean
Benzene (C ₆ H ₆)	16.25 µg/m ³	Running annual mean
	5 µg/m ³	Annual mean
1,3-Butadiene (C ₄ H ₆)	2.25 µg/m ³	Running annual mean
Carbon Monoxide (CO)	10 mg/m ³	Maximum daily running 8 hour mean
Lead (Pb)	0.5 µg/m ³	Annual Mean
	0.25 µg/m ³	Annual Mean

Air Quality in Cheshire East

Proportion of pollution from traffic in Cheshire East?

Cheshire East	
Diesel Cars	35%
Diesel LGVs	18%
HGVs	11%

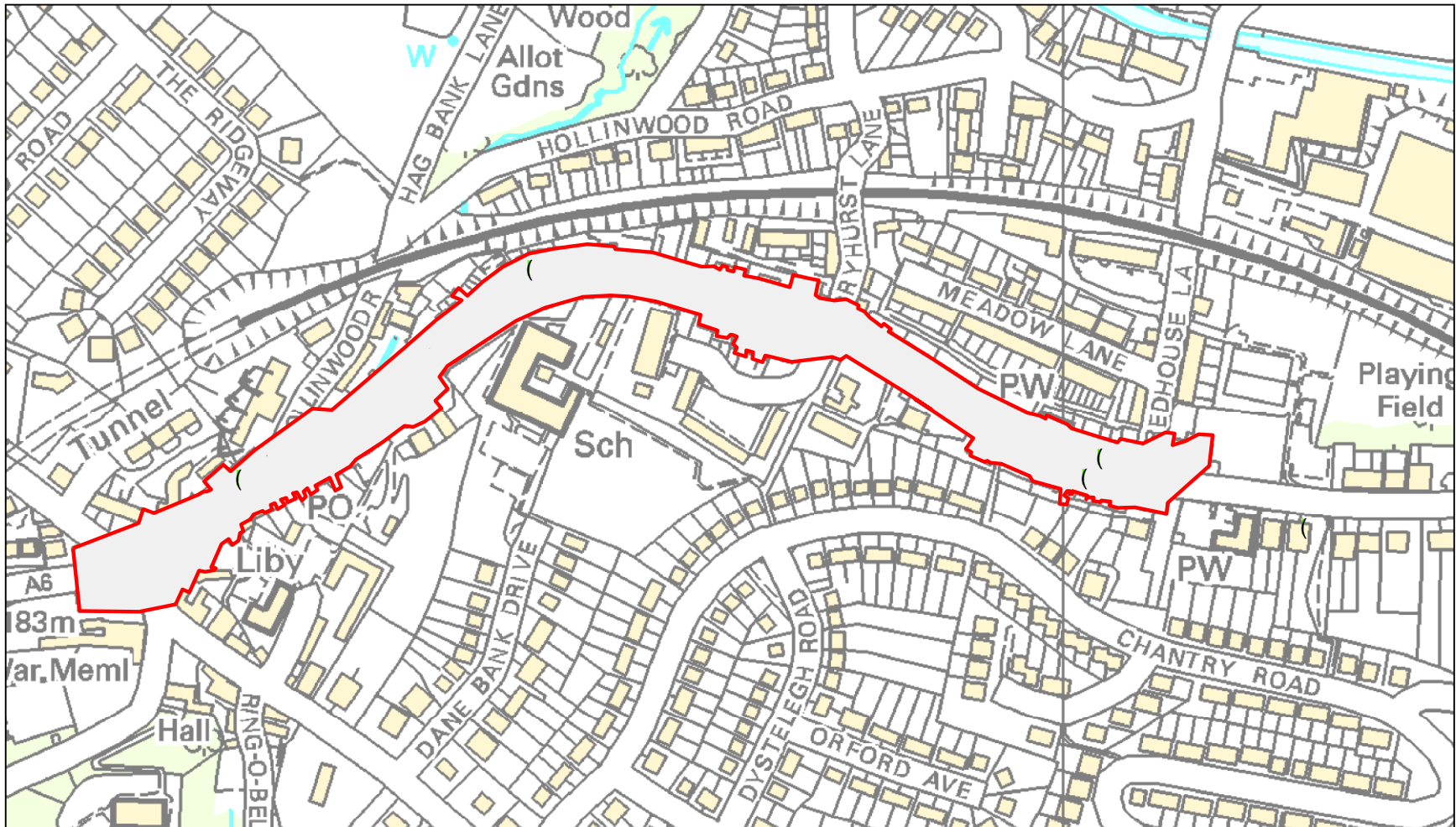
NB: Percentages based on 2016's traffic data

Air Quality monitoring within the borough

- **We currently operate one Real Time Analyser (RTA) within Cheshire East in Disley**
- **There are currently 17 (soon to be 19) Air Quality Management Areas within Cheshire East which are all related to traffic, one of which is in Disley.**
- **The current number of diffusion tubes located around the borough stands at 137, of which there are 5 located within Disley.**
- **Particulate Monitoring**

Monitoring within Disley

The tubes in Disley are located here:



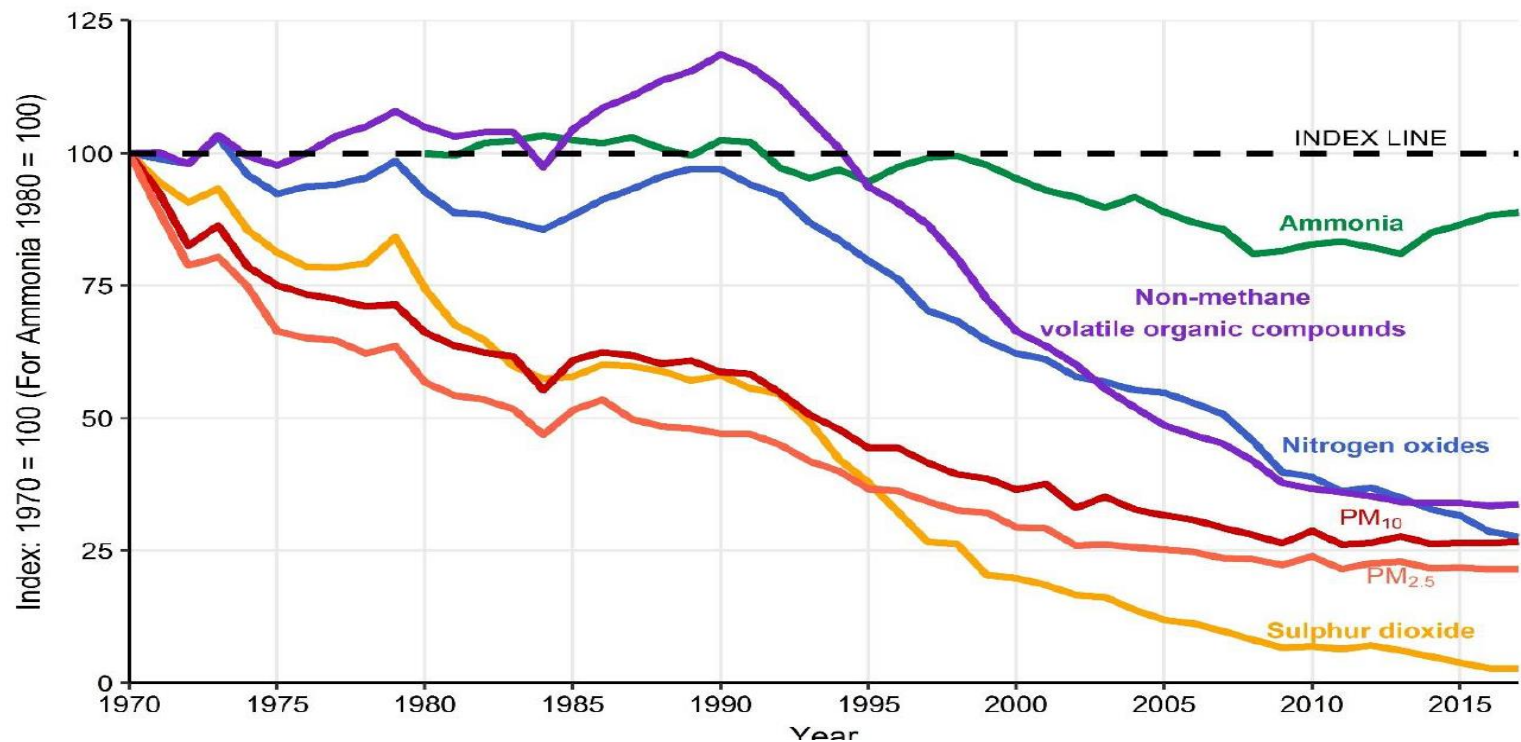
Monitoring within Disley

Monitoring locations

- **Relevant Exposure**
- **Annual mean this is domestic properties**
- **Try to locate as close as possible**
- **Distance corrected**
- **Obstructions such as Hedges & Trees**

National Trend

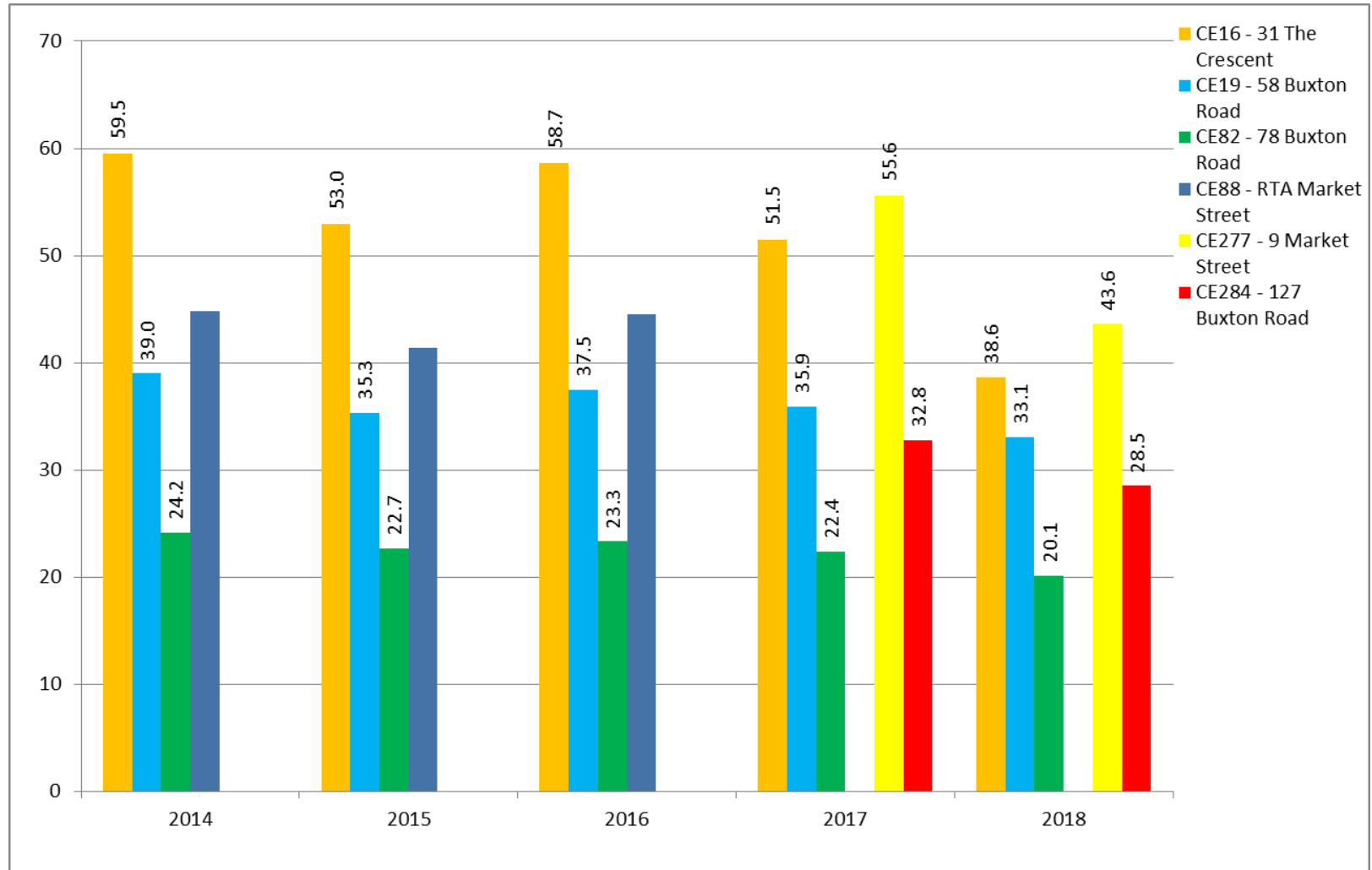
Figure 1: Trends in annual emissions of sulphur dioxide, nitrogen oxides, non-methane volatile organic compounds, ammonia and particulate matter (PM₁₀, PM_{2.5}) in the UK: 1970 – 2017



Defra National Statistics Release: Emissions of air pollutants in the UK, 1970 to 2017

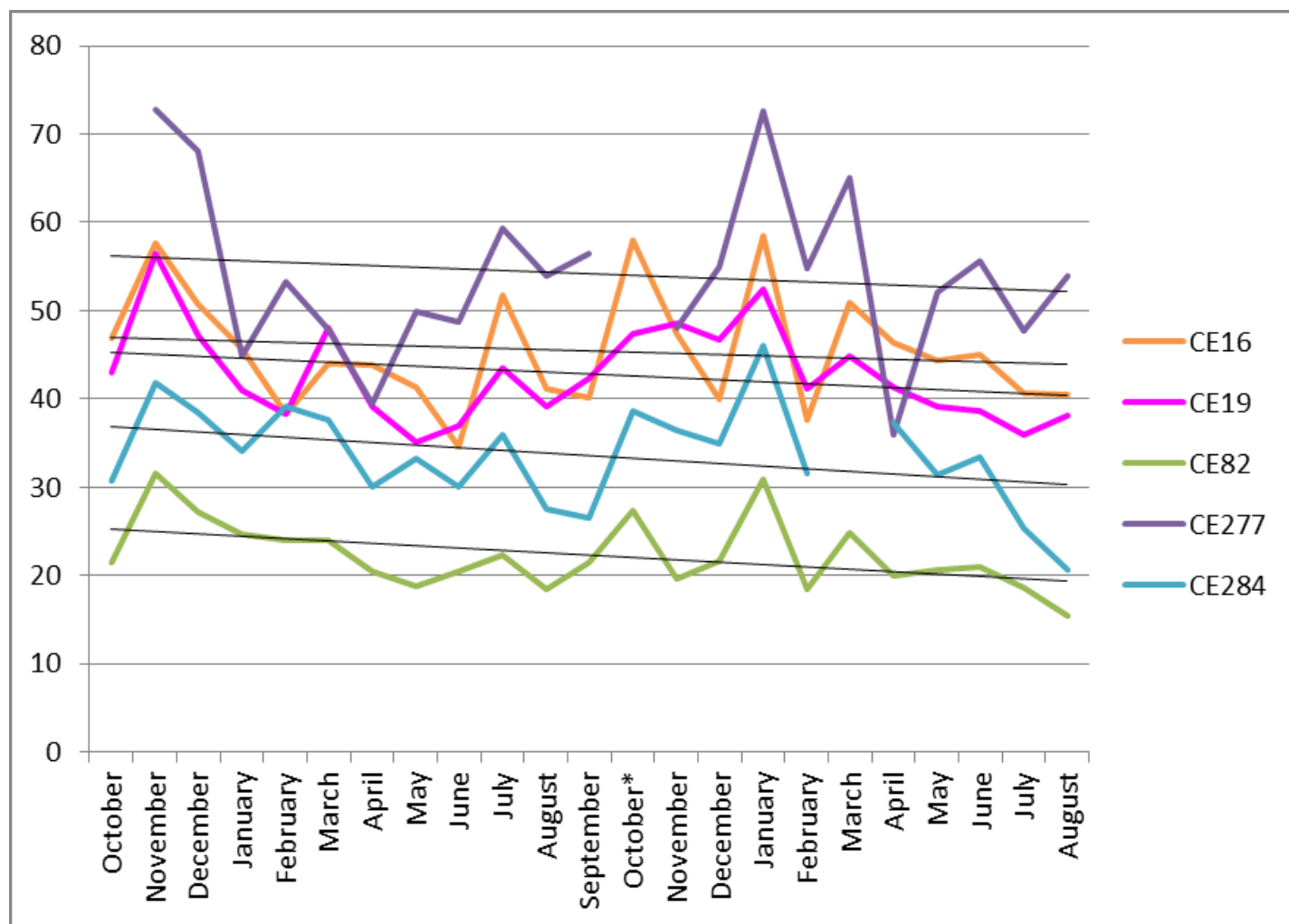
Monitoring Results

- The graph below shows the annual results for the last five years:



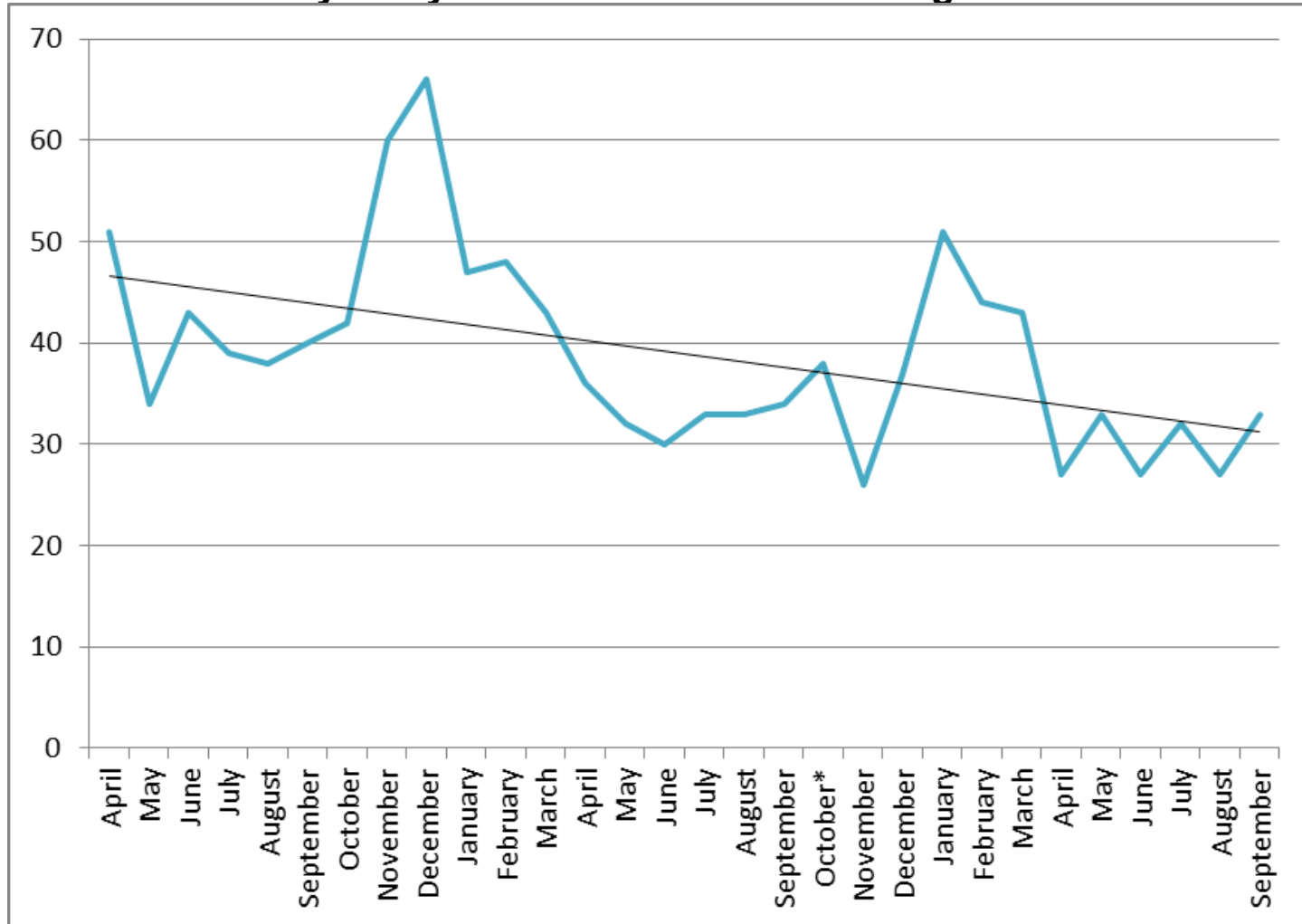
Monitoring results – pre & post MARR

- The raw monthly diffusion tube results for Oct '17 - Aug '19:



Monitoring results – pre & post MARR

- The monthly analyser results for Oct '17 - Aug '19:

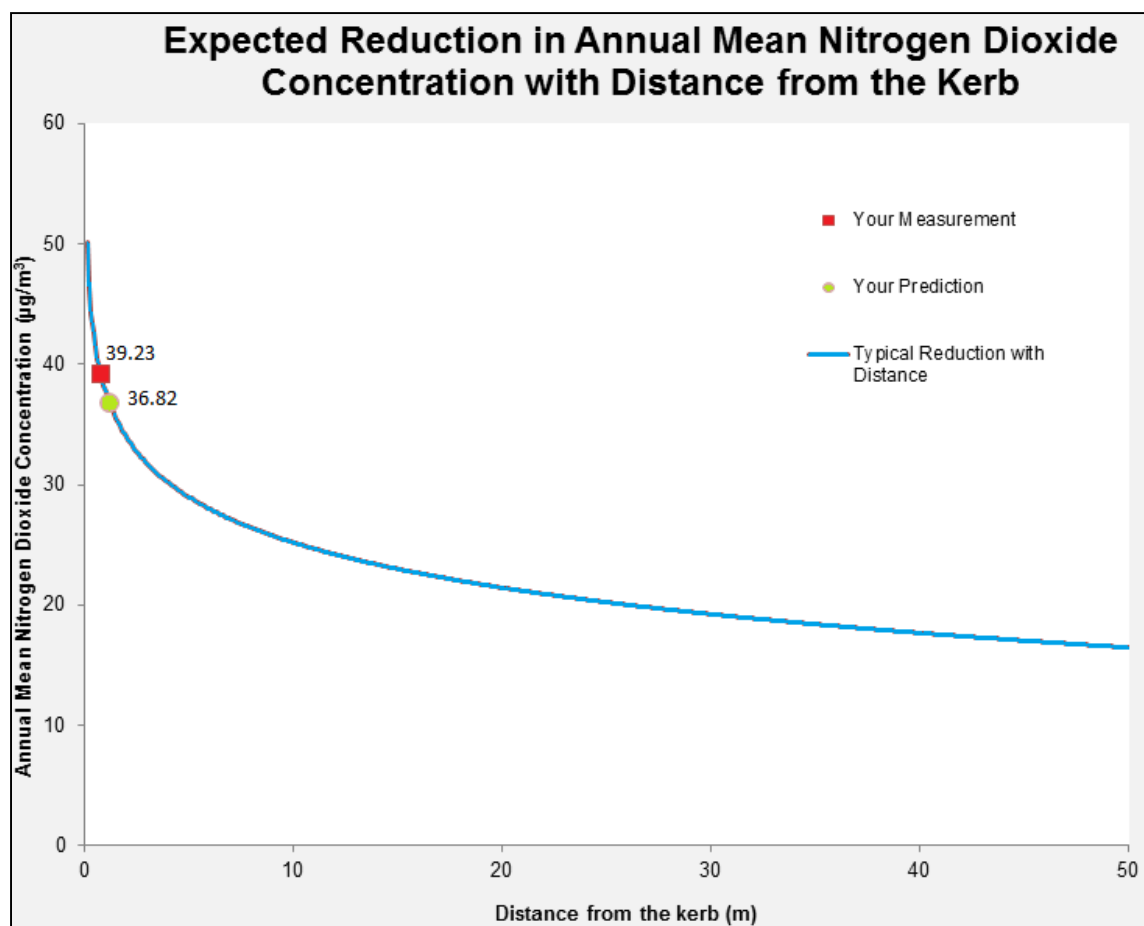


Whaley Bridge Dam

- These was a small drop in readings
- Difficult to compare to previous years
- Alternative routes

Monitoring results – distance correction

- The graph below shows an example (CE93's result for 2017) of how quickly NO₂ concentrations decrease over distance



Monitoring results – distance correction examples

- Below are some examples of the effects of distance correction on the annual averages:

Tube Number	Address	2018	
(all results in $\mu\text{g}/\text{m}^3$)		Pre Distance correction	Post Distance Correction
CE16	31 The Crescent	40.34	38.64
CE19	58 Buxton Road	38.80	33.05
CE82	78 Buxton Road	20.17	20.10
CE277	9 Market Street	46.57	43.63
CE284	127 Buxton Road	30.98	28.50

Action Planning

- **The Cheshire East AQAP (2018-2023) has been approved by Defra**
- **It's available on the website**
- **Contains general actions for across the borough and 7 specific actions for Disley**
- **Funding actions**

Action Planning

- **DIS1** - Traffic Mgt to ensure the SEMMMS scheme recommendations are implemented.
- **DIS2** – Transport planning & infrastructure - to support the improvement of rail facilities
- **DIS3** - Speed limit reduction – However, this is not support by the Police and why the mitigation measure were put in as part of SEMMMS.

Action Planning

- **DIS4** - Promote low emission transport i.e. LEZ or CAZ.
- **DIS5** – Road user charging/weight restriction
- **DIS6** – Review possibility of Bypass for Disley
- **DIS7** – General Traffic Mgt i.e. traffic lights at Redhouse Lane

Response to Questions

- Are air quality monitoring points in the optimal location?
- In relation to DIS12 does this mean that you will constantly update and liaise with Disley Parish/ Community Air Quality group?
- What progress has been made in producing an Air Quality Health Impact Statement for Disley and who is responsible for its production?
- What will be the ongoing process for delivering the revised CEBC Air Quality Action Plan and what priority has been given to the Disley AQMA?
- What are the timescales associated with actions laid out in the Air Quality Action Plan ? Has any action been taken so far?

Response to Questions

- What were the air quality readings for Disley during the period of the A6 diversions due to the Whaley Bridge dam emergency?
- Has the Council decided on designated HGV routes and if so what are they?
- The plan talks about imposing low emission zone, what would trigger this happening? (DIS4)
- Has any consideration been given to restricting the times of HGV's travelling through Disley when children are going to and leaving the primary school? (DIS4)
- In line with DIS5 what would trigger RUC?
- AQAP 18/23 page 19, what concrete plans does CEBC have for weight restrictions of HGV's in Disley and when?

Response to Questions

- Active Travel plans would encourage more walking and cycling, what plans does CEBC have for Disley/Newtown?
- Are there any concrete plans to introduce electric charging points in Disley/Newtown?
- Do you know who is responsible for producing safe walking maps for Disley/ Newtown (safe from road pollution)?
- DIS2 talks about public transport planning and interchange, what is meant by this, Does CEBC support Newtown bus interchange?
- When will CEBC start to measure particulates in Disley?
- AQAP 18/23 page 13 & 21 mentions NOx busting paint and green planting, when will this occur?

Response to Questions

- What budget has CEBC given to implementing AQAP 18/23 in Disley?
- AQAP 18/23, page 14, states importance of engagement with the local public, what other actions are planned?
- Does CEBC intend to conduct air quality awareness campaigns in Disley/Newtown to make residents aware of the negative effects of air pollution?
- AQAP 18/23 page 19 & 20 incentivise parking for low emission vehicles, what plan does CEBC have regarding Disley/Newtown and by when?
- AQAP 18/23 page 20 when are vehicle emission testing going to be undertaken in Disley/Newtown?

Response to Questions

- Is there any signs that the council is being proactive in relation to reducing air pollution in Disley/Newtown and is there a budget for improvements?
- Does the A6 corridor group still exist?
- Why can we not have a 30 MPH for the whole route through Disley and Newtown enforcement by speed monitor cameras, DIS3?
- Where are we up to with Disley bypass?
- What was the outcome of the investigation into the traffic lights at Redhouse Lane?

