



#LETPOMPEYBREATHE

Air Pollution in Portsmouth

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<https://greenpompey.org.uk/let-pompey-breathe/>
<https://www.sheerman-chase.org.uk/>

Overview

- About pollution, causes and effects
- Let Pompey Breathe
- Current situation
 - Legal, policy situation
 - Pollution measurements
- Evaluating Solutions
- Questions?

What is air pollution?

- Nitrogen dioxide (NO₂) is an invisible gas
- Particulates (PM2.5, PM10) are tiny solids or liquids floating in air
- Sulphur dioxide (historical problem in the UK)
 - Addressed by legislation
- Causes health problems
 - Linked to cancer, asthma, stroke and heart disease, diabetes, obesity, and changes linked to dementia

Royal College of Physicians, *Every breath we take: the lifelong impact of air pollution*, Feb 2016

Small particles, BIG problem

- 23,000-50,000 deaths nationally *per year* (£20 billion annually)
- 95-130 deaths in Portsmouth *per year (very approximate)*
- Estimates are from demographic data
 - Manifests as poor health, shortened life expectancy
- Report issued jointly by three parliamentary committees:
 - “*Air pollution is a national health emergency ... It is unacceptable that successive governments have failed to protect the public from poisonous air.*”

NO₂ Sources



- Transport is the biggest contributor

Source Apportionment Study 2017, AECOM



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Let Pompey Breathe

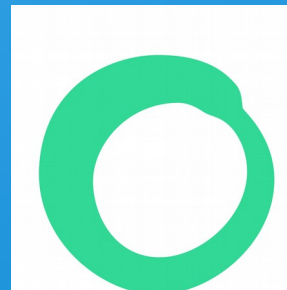
- Campaign group for safe clean air in Portsmouth
- Activities
- Partner organizations
 - Friends of the Earth
 - Keep Milton Green
 - And the logos...



Portsmouth  Green Party

Milton Neighbourhood Plan

 **PompeyBUG**
Portsmouth Cycle Forum





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Legislation and Policy



1996-2008
Ambient Air
Quality Directive

European Court
of Justice



Clean Air Act
1953, 1968, 1993

Air Quality
Standards
Regulations 2010

New Clean Air
Act?
Brexit?



Clean Air
Strategy 2018

~~Air quality plan for
nitrogen dioxide
(NO2) in UK (2015)~~

~~Air quality plan for
nitrogen dioxide
(NO2) in UK (2017)~~

Supplement to the
UK plan
for tackling roadside
NO2 concentrations



Annual Status
Report 2018



~~Air Quality Strategy
2017-2027~~

Targeted Feasibility
Study, July 2018

Draft Plan,
Jan 2019

Final Plan,
31st Oct 2019

Pollution Limits

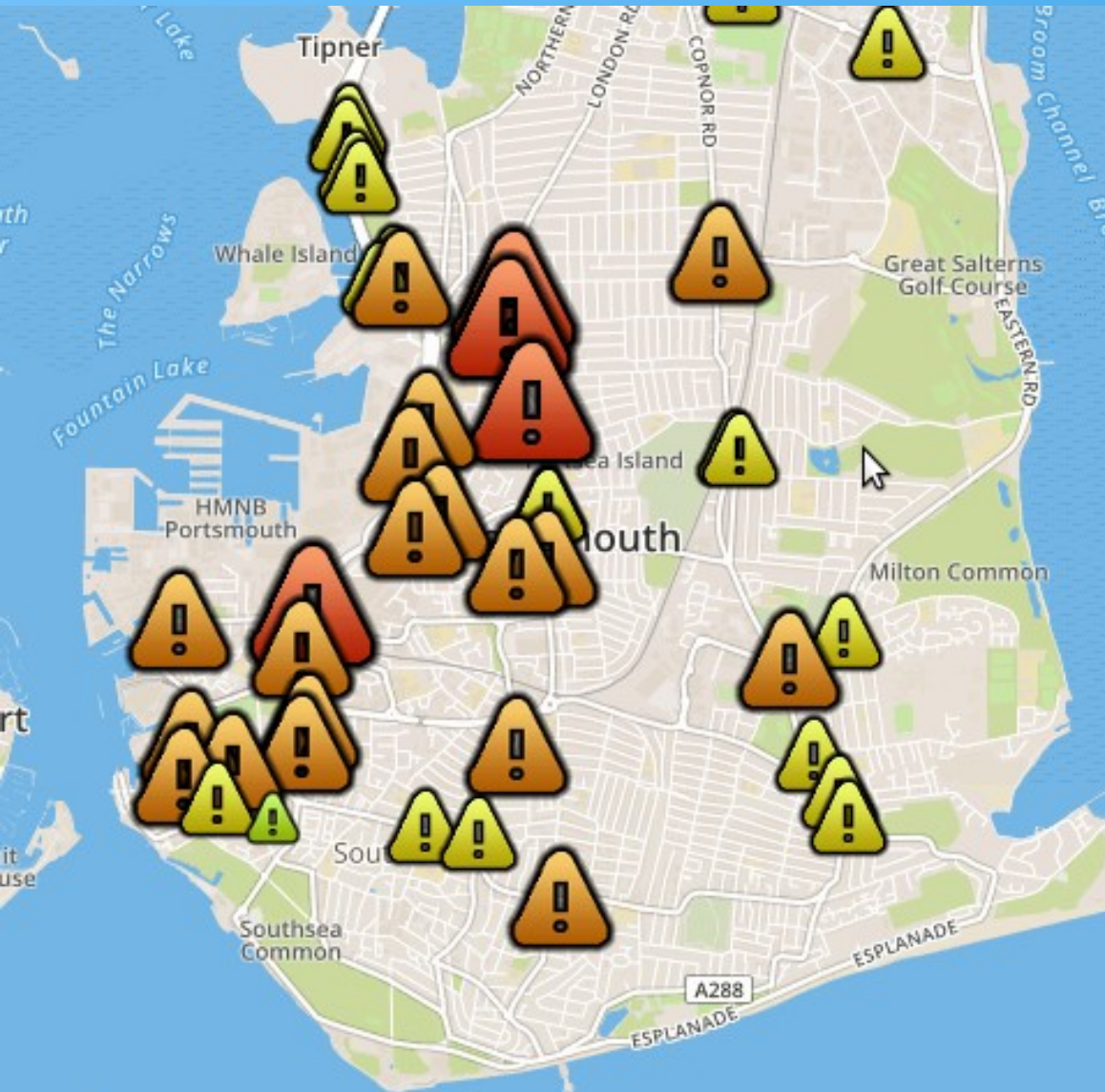
- Various limits imposed by UK law
 - 40 $\mu\text{g}/\text{m}^3$ annual average for NO_2
 - 40 $\mu\text{g}/\text{m}^3$ annual average for PM_{10}
 - 25 $\mu\text{g}/\text{m}^3$ annual average for $\text{PM}_{2.5}$ by 2020
 - And others!
- World Health Organization (not in law)
 - Stricter limits for particulates
- Government responsible for monitoring



National air quality objectives <https://uk-air.defra.gov.uk/air-pollution/uk-eu-limits>

WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide
Global update 2005

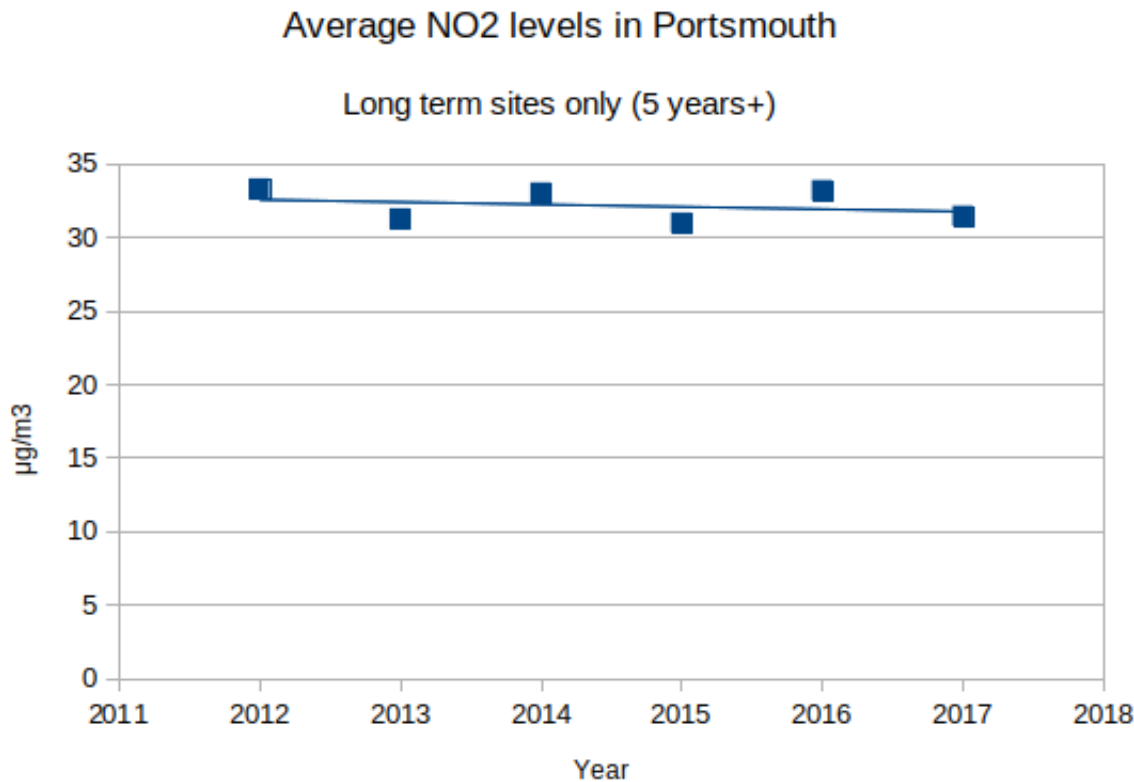
NO₂ Measurements 2017



- Large red triangles indicate legal limit exceedances (above 40 $\mu\text{g}/\text{m}^3$)
 - Amber is 30-40 $\mu\text{g}/\text{m}^3$
- Worst is 45 $\mu\text{g}/\text{m}^3$ in London Road
- Any missing hotspots?

*Draft 2018 Air Quality
Annual Status Report (ASR)*

NO₂ Long Term Trends



- Slight variation due to weather
- No long term change!
 - fairly constant at 32 µg/m³

City Centre Road (CCR) Scheme

- Major changes planned between M275, around Sainsburys to Anglesea Road
- Mostly focused on road capacity increase
 - Pedestrians, cyclists and buses should take priority



Impact of CCR Scheme

- Increase pollution by 3.4% around the city
- Some areas see significant increases or decreases in NO₂
- University and southern end of Commercial Road badly affected, which are already polluted (*is this legal?*)
- Portsmouth needs a scheme that *improves* air quality

wsp-consultants, *City Centre Road Project, Addendum to Environmental Statement*, Appendix A.6, April 2018, Revision 3





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PCC reports are not great

- Reports often cherry pick good results
 - Environmental report on CCR ignores overall impact
- Traffic prediction data is selectively used
 - Road schemes use higher values 4.1% pa e.g. CCR planning documents
 - Air quality modelling tends to use lower 0.4% pa e.g. *Source Apportionment Study 2017, AECOM*
 - No need for road scheme!
 - This has been put to Lynne Stagg of PCC several times with no satisfactory response
 - PCC apparently excludes future development in air quality planning

Evaluating Solutions



- High Court in 2018: government needs to "achieve compliance *as soon as possible*, by the *quickest route possible* and by a means that *makes that outcome likely*."
 - Latest Client Earth challenge shows central government cannot water down the law for local authorities
 - High court rejected cost as grounds not to consider measures
- Current measures are *welcome* but obviously not enough
 - Many measures taken by PCC will have negligible impact
 - PCC claims to be working towards goal but progress wiped out by traffic growth
 - PCC reluctant to consider strong measures
 - Please prove me wrong!

Challenges to Portsmouth CITY COUNCIL

- What year will we come into legal compliance?
- On what basis are we confident of that?
 - Realistic effect of measures taken?
 - Which traffic projection do you accept?
 - including development/the city centre road scheme?
- Will strong measures be considered in planning?
 - Clean air zone, zero emission zone, diesel ban
 - Education and small incentives may not be enough
- What happens if plan is still deficient?

Further Info

- Let Pompey Breathe
 - Blog: <https://greenpompey.org.uk/let-pompey-breathe/>
 - Social media: Facebook, Twitter hashtag
- Tim Sheerman-Chase MPhys PhD
 - Easy to find on web and social media!
 - *Portsmouth*  **Green Party**
- Thanks to *Friends of Old Portsmouth* for ideas
 - <http://www.foopa.org.uk/>

