



Air Quality Update

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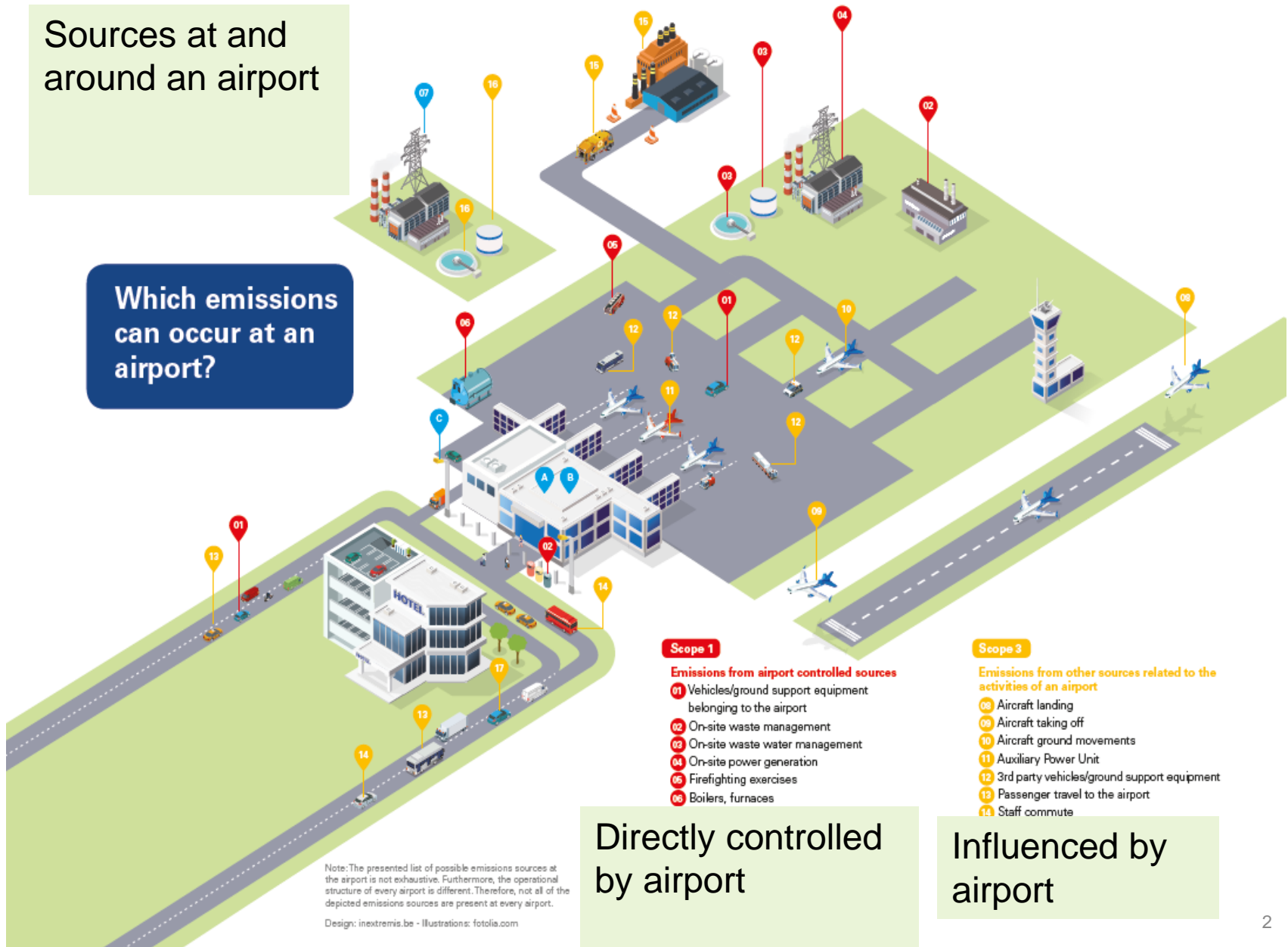
20th September 2018



What are the sources that contribute to air quality

Sources at and around an airport

Which emissions can occur at an airport?



What do we measure

| Pollutant | Concentration Measured As | National Limit Values |
|------------------|---------------------------|--|
| Nitrogen Dioxide | Annual Mean | 40 $\mu\text{g}/\text{m}^3$ |
| | 1-hour Mean* | 200 $\mu\text{g}/\text{m}^3$, to be exceeded no more than 18 times per year |
| PM ₁₀ | Annual Mean | 40 $\mu\text{g}/\text{m}^3$ |
| | Daily Mean | 50 $\mu\text{g}/\text{m}^3$, to be exceeded no more than 18 times per year |
| Benzene | Annual Average | 5 $\mu\text{g}/\text{m}^3$ |

*Guidance produced in UK states that the 1-hour mean nitrogen dioxide limit value is unlikely to be exceeded where the annual mean concentration is below 60 $\mu\text{g}/\text{m}^3$

How we measure



Continuous analysers

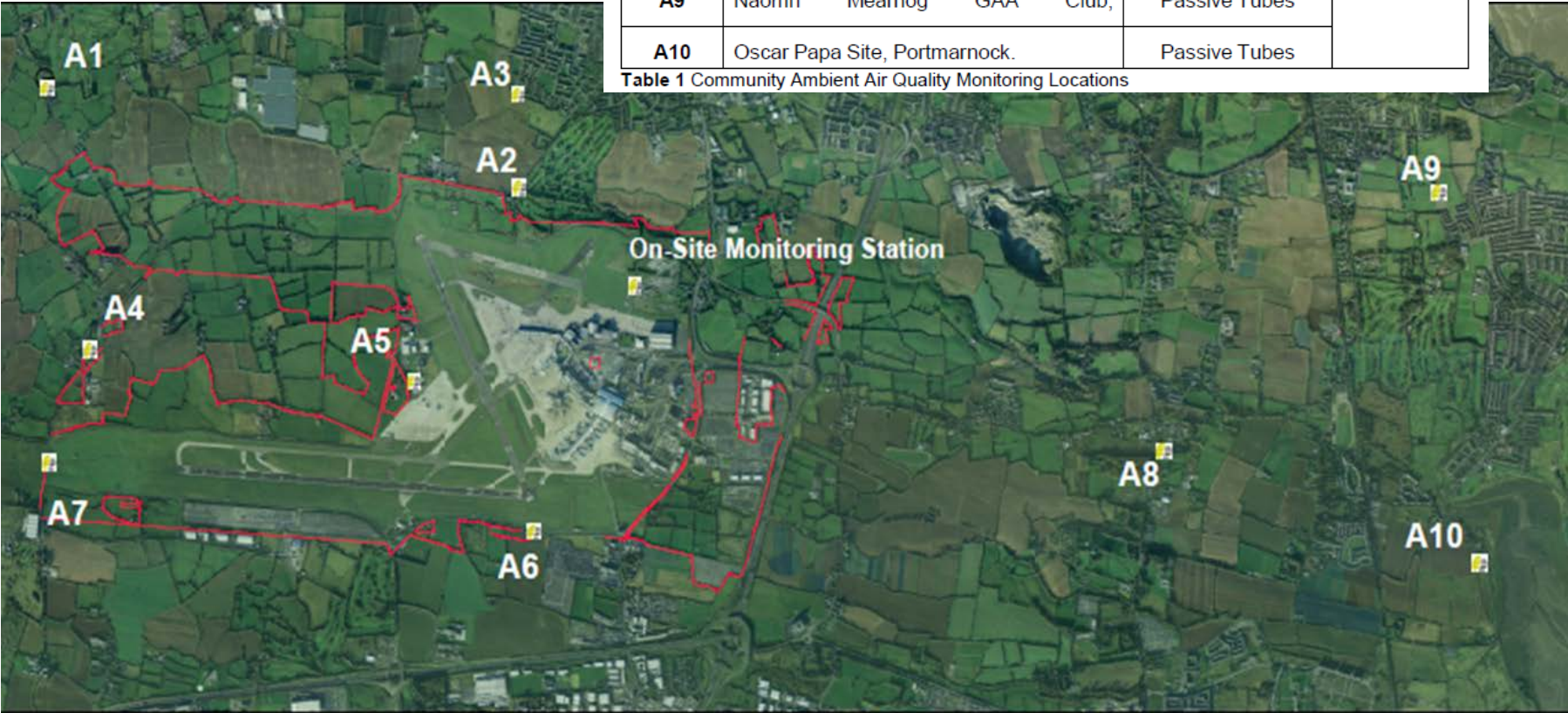


Passive diffusion tubes

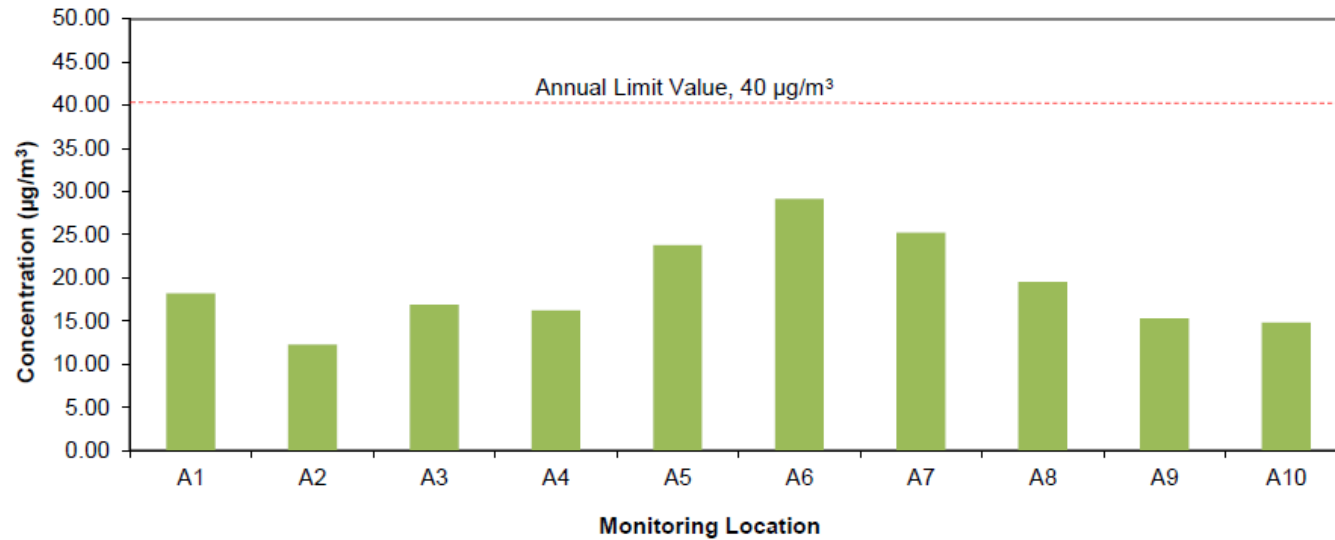
Where we measure

| Ref | Location | Method | Parameters |
|---------|---|----------------------------------|-------------------------------------|
| On-site | Dublin Airport. | Continuous analyser ¹ | NO ₂ PM ₁₀ |
| A1 | Forrest Little Golf Club. | Passive Tubes | NO ₂ Benzene |
| A2 | Kilreesk Lane, St. Margaret's. | Passive Tubes | |
| A3 | Ridgewood Estate West, Swords. | Passive Tubes | |
| A4 | St. Margaret's School and Parish House. | Passive Tubes | |
| A5 | Fire Station, Huntstown, Dublin Airport. | Passive Tubes | |
| A6 | Southern Boundary Fence, Dublin Airport | Passive Tubes | |
| A7 | Western Boundary Fence, Dublin Airport | Passive Tubes | |
| A8 | St. Nicholas of Myra School, Malahide Road. | Passive Tubes | |
| A9 | Naomh Mearnóg GAA Club, | Passive Tubes | |
| A10 | Oscar Papa Site, Portmarnock. | Passive Tubes | |

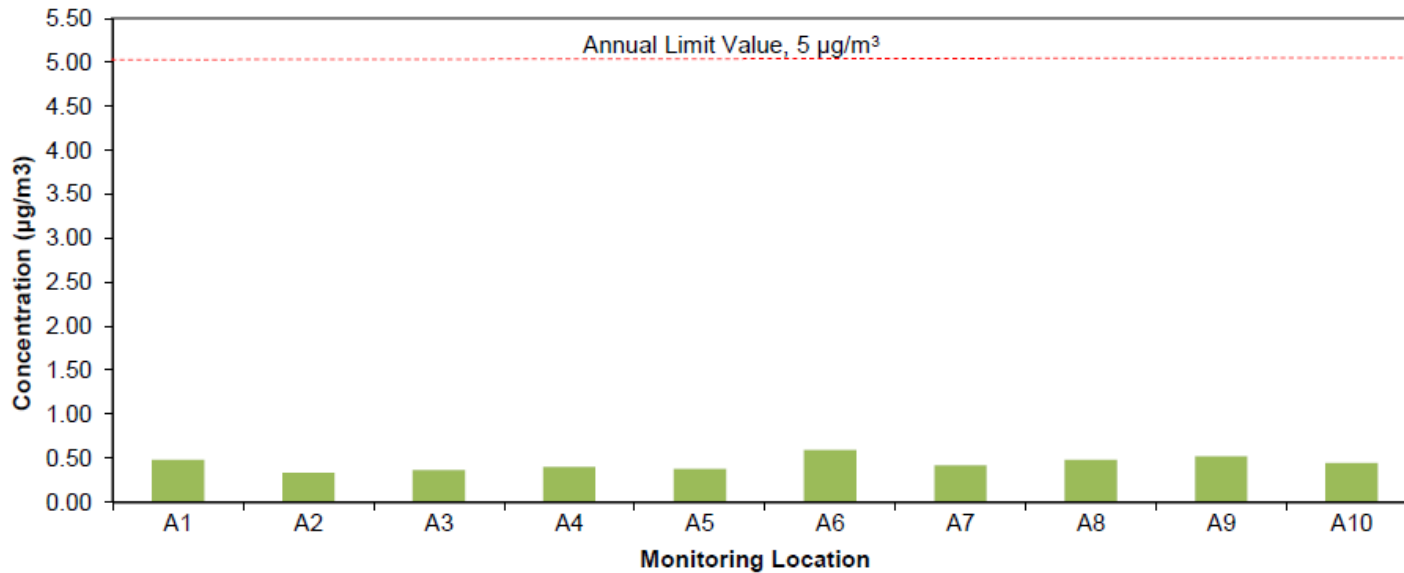
Table 1 Community Ambient Air Quality Monitoring Locations



How we report: Diffusion tubes

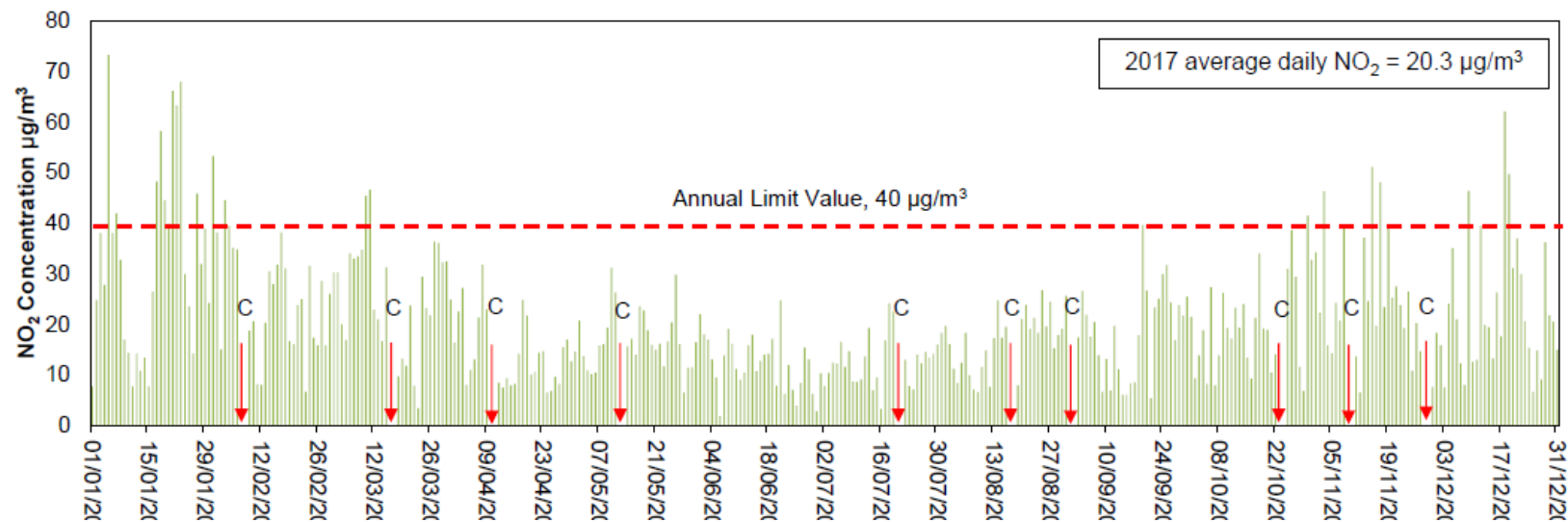


Nitrogen
Dioxide

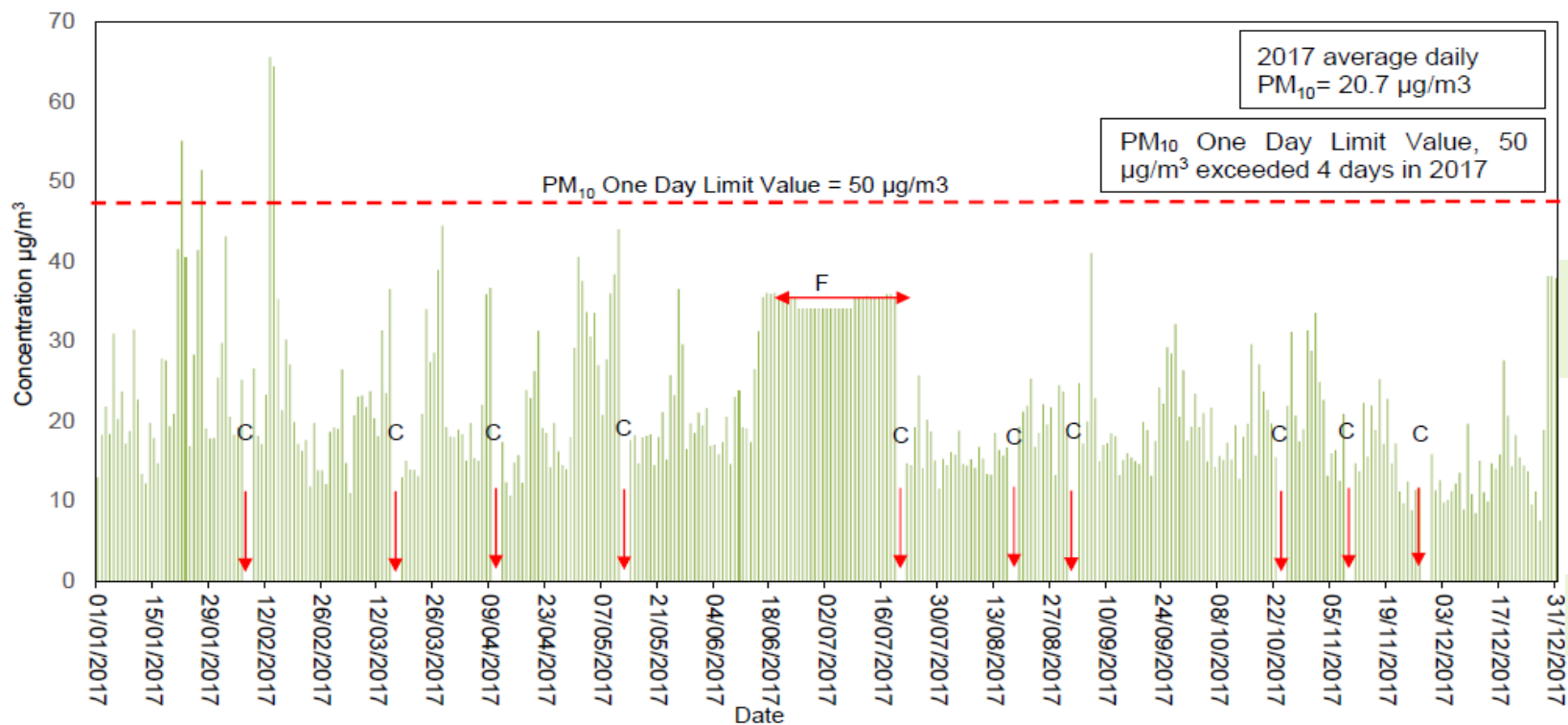


Benzene

How we report: Continuous analyser



Nitrogen
Dioxide

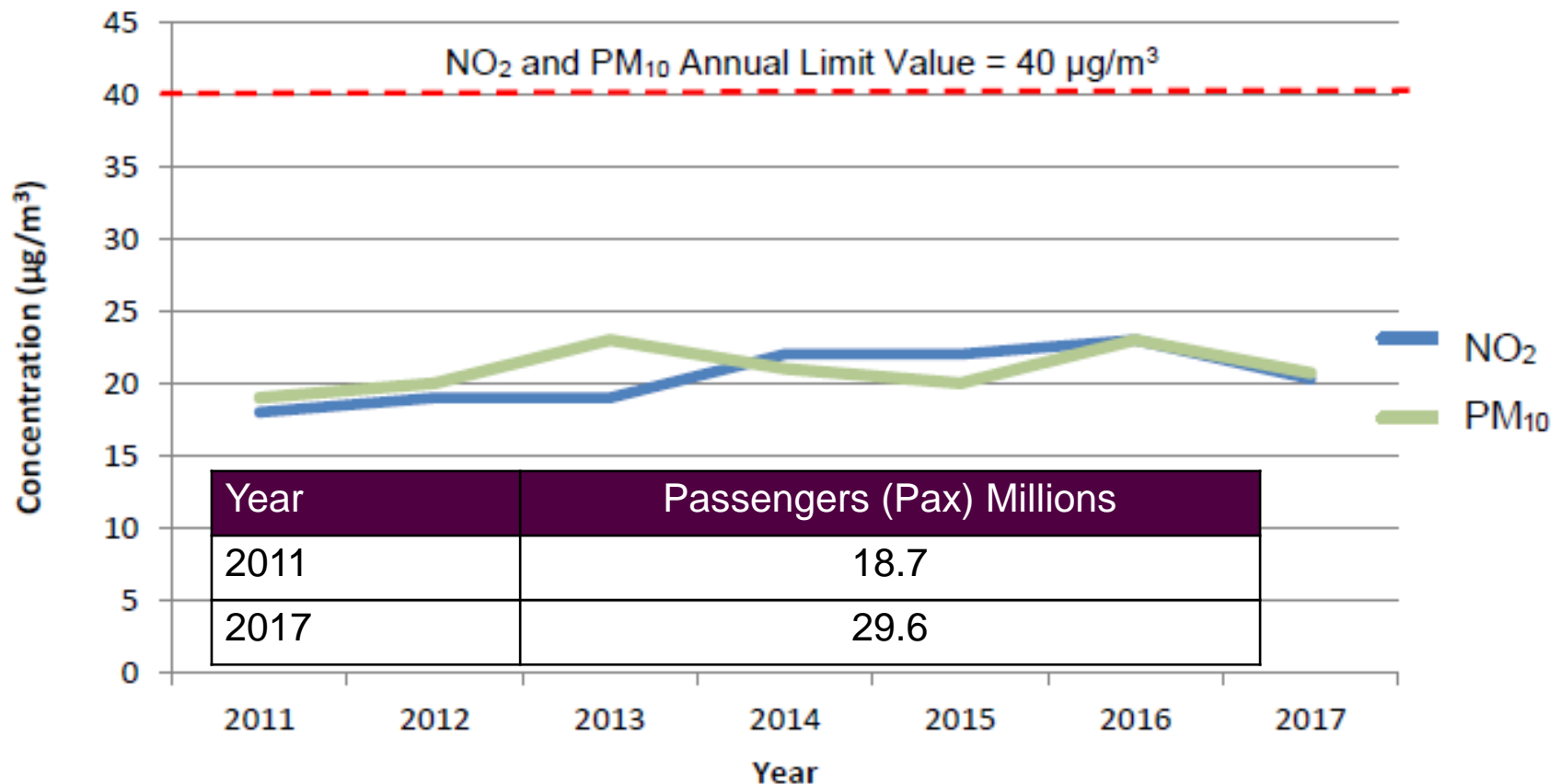


Particulate
Matter

C=Calibration
F= Fault or Repair

What does it mean

Annual Mean NO₂ and PM₁₀ Concentrations (DAP: 2011 - 2017)



- With 60% increase in pax numbers air quality at on-site station broadly unchanged
- Some increases in NO₂ diffusion tube results, mainly close to major roads
- Primary source is road traffic although airport activity does contribute to overall emissions

Annual and Quarterly Air Quality Reports
available on

<https://www.dublinairport.com/about-us/-community-affairs/air-quality-data>

QUESTIONS