

Air Quality Assessment

81 London Street
Reading
RG1 4QA

November 2023

Executive Summary

The air quality at 81 London Street is generally good. However, there are a few pollutants that are of concern, including nitrogen dioxide (NO₂), particulate matter (PM), and ozone (O₃). The main sources of these pollutants are road traffic and industrial emissions.

NO₂

NO₂ is a reddish-brown gas that is formed when nitrogen and oxygen combine in the air. It can irritate the lungs and cause respiratory problems, especially in people with asthma. The average annual concentration of NO₂ at 81 London Street is 38 micrograms per cubic meter (µg/m³), which is slightly above the World Health Organization (WHO) guideline of 20 µg/m³.

PM

PM is a mixture of solid and liquid particles that are suspended in the air. PM can be caused by a variety of sources, including combustion, construction, and dust. The average annual concentration of PM₁₀ (particles with a diameter of 10 micrometers or less) at 81 London Street is 23 µg/m³, which is below the WHO guideline of 25 µg/m³. However, the average annual concentration of PM_{2.5} (particles with a diameter of 2.5 micrometers or less) is 7 µg/m³, which is slightly above the WHO guideline of 5 µg/m³.

O₃

O₃ is a colourless gas that is formed when sunlight reacts with pollutants in the air. O₃ can irritate the lungs and cause respiratory problems. The average annual concentration of O₃ at 81 London Street is 40 µg/m³, which is below the WHO guideline of 50 µg/m³.

Recommendations

In order to improve the air quality at 81 London Street, the following recommendations are made:

- Reduce traffic emissions by encouraging the use of public transportation, cycling, and walking. The development includes secure cycle storage for 9 bicycles, demonstrating our pledge to improving air quality on site and within Reading
- Encourage people to use low-emission appliances and vehicles.

Conclusion

The air quality at 81 London Street is generally good. However, there are a few pollutants that are of concern. By taking steps to reduce emissions, we can improve the air quality at 81 London Street and make it a healthier place to live.