

Air Quality Case Study from Canary Wharf Group



A 'Beat Air Pollution' Case Study for World Environment Day 2019

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The Canary Wharf Group is a fully integrated property development, investment, and management company which has overseen the development over 16.5 million square feet of office, leisure and retail space in London's docklands since 1987. Although much of the heavy industrial activities synonymous with the docklands region have long closed, due its London location, air quality continues to be high on the agenda. As such, the Group incorporates air quality measures throughout the masterplan and building lifecycle through design, construction and operations.



During the design of our buildings we consider air quality in a variety of contexts, whether that's where we place the air intake/extracts relative to local pollution sources such as main roads, through to ensuring that we specify healthy building materials that minimise Volatile Organic Compounds (VOCs) and other harmful pollutants. These design measures primarily focus on the end user of the building by ensuring that we create a healthy environment for them.

Through construction and throughout the life cycles of our buildings, we have and continue to employ a wide variety of initiatives to minimise our air quality impacts, as outlined below.

Initiatives to minimise air quality impacts

No idling zones

We have designated a number of no-idling zones around the Estate in hotspots where taxis and other vehicles typically gather. These areas are clearly designated with signs and are monitored by our security officers.

Clean Air Campaign

Our Wood Wharf development was the first construction site to support the GLA's Clean Air Campaign, which encourages drivers to turn off their engines when not in use. First deployed on our Wood Wharf site, in partnership with the London Borough of Tower Hamlets, the project team set up a stand in the lorry holding area on site and handed out promotional material designed to educate drivers on both the environmental and health impacts of engine emissions.



NRMM regulations

Our Heron Quays Pavilion project is our first to participate in London's Non-Road Mobile Machinery (NRMM) emissions scheme, first piloted on Crossrail, which mandates the use of EU Emissions Stage IIIB plant for machinery between 37 to 560kW. The project also submits NRMM data to the www.nrmm.london website, to allow for a more accurate London Atmospheric Emission Inventory (LAEI) to be developed which will help to inform air quality policy for London in the future.

Delivery logistics

We employ a delivery booking system as part of the wider logistics strategy to ensure that site deliveries are planned well in advance in order to reduce the amount of construction related traffic both on and off site.

Dust

We operate a wide variety of dust suppression methodologies from at-source suppression during demolition, minimising material stockpiles and the use of water bowsers / road sweepers on haul roads during enabling and construction works. All of these activities are captured within a project-specific air quality management plan which is regularly reviewed by the project team.



Air quality monitoring sites

In 2018 we deployed 17 air quality monitoring stations to monitor NO₂ across the Canary Wharf estate. The results of this monitoring indicate that NO₂ concentrations are low in recreational areas such as Jubilee Park and Westferry Circus, while concentrations are elevated in high vehicle traffic areas. These results will help us identify measures and target actions to improve air quality.

Biodiversity Action Plan

In 2004 we were one of the first developers in the UK to produce a Biodiversity Action Plan (BAP). When we updated our BAP in 2018, we included air quality KPIs and specific objectives seeking to improve local air quality. To read more about CWG's Biodiversity Action Plan please visit:

<https://group.canarywharf.com/corporate-responsibility/biodiversity-action-plan/>