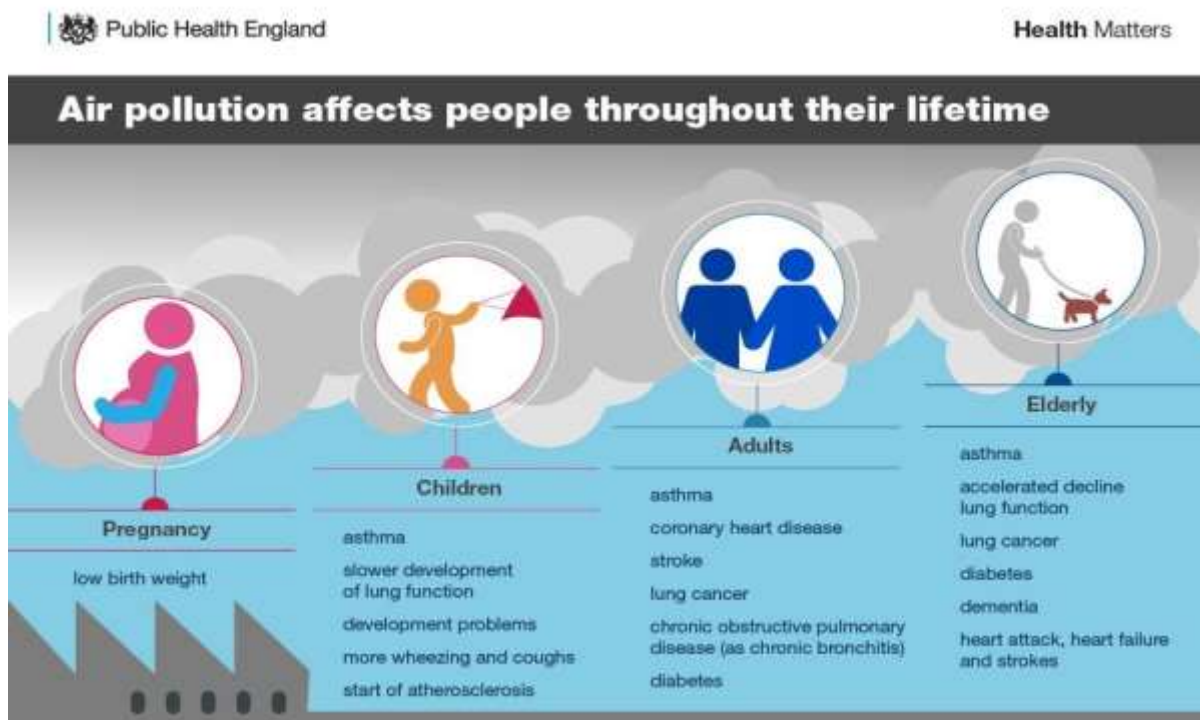


WHY THE CYCLE TRACK WILL PUSH AIR POLLUTION IN ROSEBURN TERRACE TO DANGEROUS LEVELS

The following is based on recent research by John Lamb, retired after 20 years working to improve air quality in Scotland. It shows how the CCWEL cycle track will lead to breaches in the legal limit of NO₂. John is ex-SEPA and lives in Murrayfield (and tweets with #Roseburnterrace).

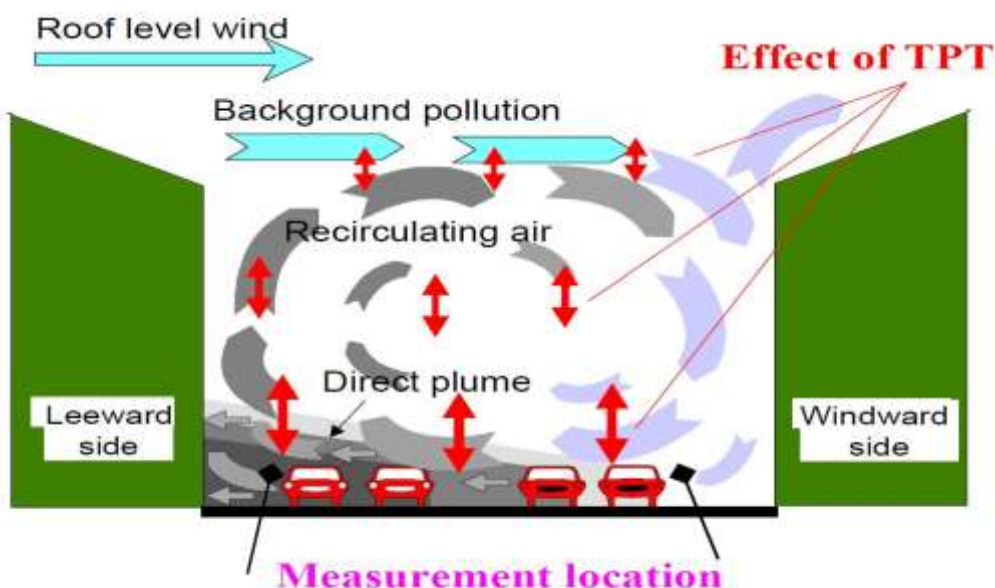
LEVELS OF NO₂

Nitrogen dioxide (NO₂) is the measure of pollution. The higher the NO₂, the greater damage to your health. The legal limit is 40. Scotland's most polluted street, St. John's Road in Corstorphine, showed a roadside measurement of NO₂ of 44 µg/m³ in 2018 . The roadside measurement of NO₂ in Roseburn Terrace in 2017 was 43 µg/m³ - and the cycleway will make it worse. [John has reported this to Christine Jardine MP, Alex Cole-Hamilton MSP and Friends of the Earth Scotland in early March 2019.]. This is the impact on health:



AIR QUALITY

Roseburn Terrace is a street canyon. Street canyons trap pollution from traffic. The effect of street canyons on air circulation can be illustrated thus:



This graphic explains why the leeward side gathers greater NO₂ levels. The leeward side in Roseburn is the south side. The prevailing wind comes from the south-west. Thus it builds up on the south side of the street, where the roadside concentration of nitrogen dioxide is almost the same as St. John's Road. This is because pollution from traffic is carried to the south side of the street, where it builds up because dispersion is very poor. Nitrogen dioxide (NO₂) on the north side of the street was 32 ug/m³ and in the south 43ug/m³.

The shops on the south side are Scotmid, House of Hound, Art et Facts, Simon Smith Collectables, Conservative Party constituency offices, etc.

The picture below shows how, at present, parked vehicles push traffic to the lanes in the middle of the street, increasing the distance between exhaust and flats, allowing NO₂ to dilute before it reaches the measuring device. (the measuring device is sited on a post at the edge of the pavement, outside the Simon Scott Collectibles shop).



The problem is that the CCWEL cycleway will move traffic closer to the south side kerb, reduce the dilution & therefore INCREASE pollution. See the street layout on next page for details. Residents and traders operating from numbers 13 to 41 Roseburn Terrace are most at risk, as they will lose all parking/loading, bringing traffic closer to their homes and shops, leading to the loss of dilution.

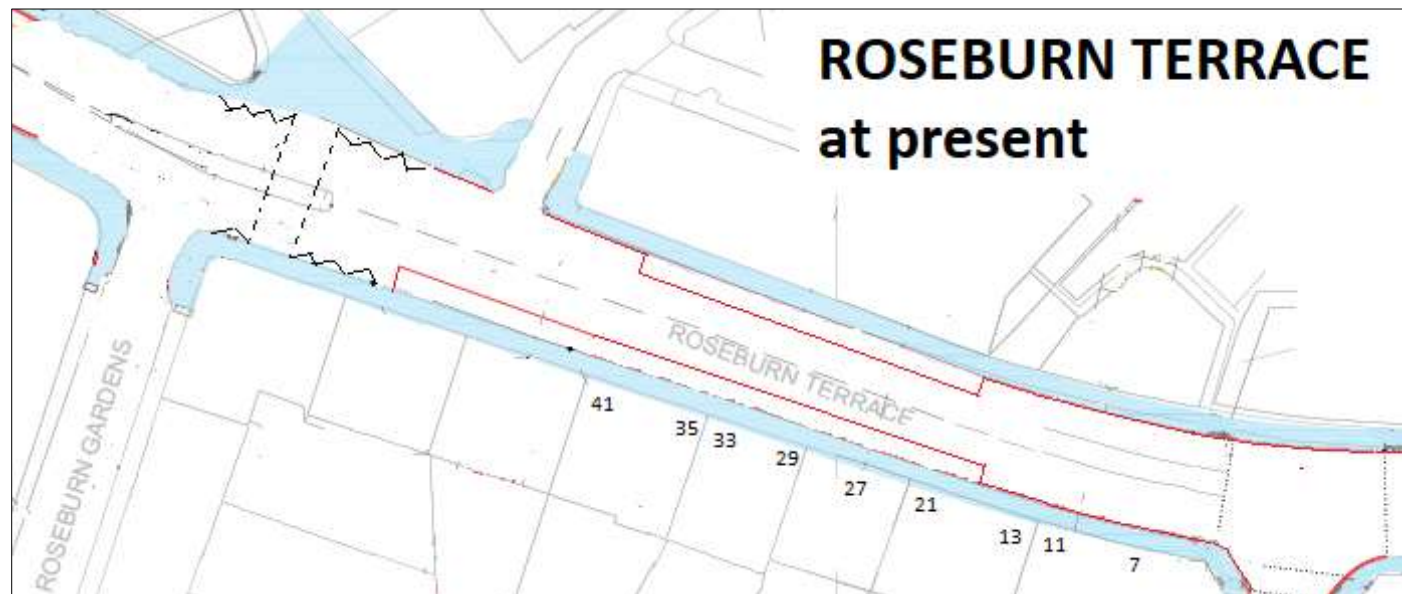
CONCLUSION

CEC must commission an air quality and health study that will assess the impact of the CCWEL on health and air quality. This should be done by a consultant - not SEPA. CEC require developers to submit one for projects such as this- but CEC itself does not.

John notes: "Buildings can affect the way air pollutants are dispersed through street design and the resulting impact on air flow. Addressing air pollution at the planning stage for major developments may reduce the need for more expensive remedial action". As noted in National Institute for Health and Care Excellence (NICE) guidance "Assessing proposals to minimise and mitigate road-traffic-related air pollution will help to ensure they are robust and evidence based." (see Air pollution: outdoor air quality and health at

<https://www.nice.org.uk/guidance/qs181/chapter/Quality-statement-2-Planning-applications>)

FoE Scotland wrote in their consultation response to CEC that re: Roseburn cycleway: "If air quality modelling, when conducted, indicates that there may be adverse impacts on air quality, the Council must include mitigation measures".
More info at www.tinyurl.com/trackmustpay



Total parking/loading will be reduced from 40m to 28m on the north side and from 68m to 34m on the south side. Parking /loading outside numbers 13 to 41 will disappear, bringing traffic closer to homes and reducing dilution of pollution, thereby raising NO2 to dangerous levels.

