



TUCAN Newsletter

Spring 2020 No.2

Not to be sniffed at!

Do you want TUCAN to help investigate air pollution problems at your workplace?

TUCAN has recently joined with other organisations to buy new air pollution detection equipment and we are looking for union health and safety reps who need help in investigating potential hazards at their workplace.

We have bought a SidePak Model AM520 (pictured) which measures airborne dust pollutants including PM2.5 particles from diesel engines which are recognised as a major health hazard. They can cause respiratory problems and are so small they can cross into the bloodstream, even crossing to the unborn child. Particulate and other air pollution are recognised as a source of cancer and dementia.

The new kit is reasonably compact and fairly straightforward to use and that expertise will be provided by TUCAN along with a report on what the monitoring discovered. Union reps can then take the information to their employer for discussion on how any concerns that arise can be addressed. The equipment can be used as a personal sampler, measuring from an individual's breathing zone, or measuring the general environment from a fixed place.



We are offering this service to trade union health and safety representatives because we know they have legal rights at work and will have formal negotiating procedures in place for raising issues. However, we are not excluding workers who perhaps do not have access to reps, but we are aware that in those circumstances measurement and raising any issues are likely to present barriers which will have to be overcome.

If you are interested in taking us up on our offer please show this article to your union rep, committee, branch or other body and contact us at [gjacomsg@gmail.com](mailto:gjacoms@gmail.com)

Union action on toxic tube dust

The train drivers' union, ASLEF, has recently raised members' concerns regarding airborne dust on London's Underground again with Transport for London.

Universities have previously shown worrying levels of airborne pollutants on the tube, the main one being iron oxide with traces of quartz, chromium and copper also present, as well as dust from human skin, rubbish etc.

A BBC report pictured a driver's view of a dusty tunnel and the accumulation of dirt on a face mask used by a driver. They reported one driver saying: *"Drivers and station staff go home and blow their noses and it's black. I know of drivers who have had breathing difficulties, asthma and sinus problems. After one shift you can get a cough at the back of your throat. It's common."*

ASLEF members have been calling for action by London Underground for many years with an Air Quality Working Group being set up which has yet to get to grips with the problem. Underground staff are very concerned about the possible long-term ill-health effects of exposure and ASLEF is calling for urgent research into this issue.

Finn Brennan, ASLEF District Organiser said: *"The jury is still out into what the long-term effects are. Our members are spending eight hours a day, five days a week, down there and they are concerned."*

Transport for London says it is "doing all it can to ensure the air was as clean as possible" and is supporting research into the effects of Tube dust.

BBC news report: <https://bbc.in/2QkQhW7>

Brake dust possibly as harmful as diesel fumes to immune cells

A recent report from King's College, London estimates that airborne metal particulate pollution from the abrasion of brake pads may cause respiratory inflammation and reduce the ability of immune cells to kill, similarly to particles derived from diesel exhaust. The brake particulates could be contributing to increased susceptibility to airway infections and other negative effects on respiratory health.

Further detail: <https://bit.ly/2x5DwYC>

BFAWU calls for action on drive through worker exposure

In a recent piece in the BBC TV magazine Inside Out surreptitious air pollution monitors were placed very near to the payment/collection points at a small number of drive through fast food outlets and the monitoring results have raised health concerns for all similar drive through workers.



The research was done by Coventry University detecting levels of nitrogen dioxide and particulate matter recorded for a two-week period.

Assistant Professor Dr Anitha Chinnaswamy said: *“As far as we’ve seen there have been no studies to measure the pollutant levels at drive through outlets.”*

A McDonald’s outlet at Erith in South East London recorded average levels of nitrogen dioxide 25 per cent above the 40 µg/m³ legal limit (yearly average).

Another sample at a Costa Coffee Drive Thru at Taunton in Somerset showed levels of NO₂ reaching 650.6 µg/m³, 16 times the legal limit when averaged out across the year.

Large concentrations of PM 10 and PM_{2.5}, the particles found in exhaust soot were also recorded at sites across the country.

At one KFC outlet in Liverpool, levels of PM_{2.5} reached 279.4 µg/m³, more than 10 times the allowable annual average of 25 µg/m³.

Dr Mark Miller, who researches air pollution at the University of Edinburgh including work funded by the British Heart Foundation, said of the Liverpool findings: *“This is well above what you’d see for a typical city and the fact that these (levels) are being maintained for longer periods of time is concerning.”*

On witnessing the results Ronnie Draper, General Secretary of the bakers’ union BFAWU, said in the documentary: *“I think as a priority we should be talking to the companies we deal with who have drive through restaurants and see exactly what they’re going to do. Every one of those spikes has the potential to cause someone irreparable damage. It’s the particulates that can get into the lungs that very often cause the problems. I’m not a doctor but that’s a horrendous spike and needs dealing with.”*

In response to the findings some of the employers said the results were flawed because of the nature of sampling and not taking into account existing safety measures such as shutting the window when not in use, job rotation etc.

Further information: <https://bit.ly/39ZSNZN> and <https://bit.ly/2vuhuOM>

New environment bill

The government is now overseeing the passage of its new environment bill through parliament. This bill sets out targets to control air pollution and address some climate change issues and which has been criticised for not being stringent enough. Critics have argued that the targets for reducing carbon emissions are not fast enough and targets for reducing particulate air pollution do not address the smaller PM_{2.5} particulate matter issue properly.

The advent of the bill has seen concerned bodies, charities, NGOs etc, get together in an attempt to lobby the government for them to adopt the World Health Organisation’s (WHO) standard for PM_{2.5} exposure and to act sooner rather than later.

This group of organisations, which TUCAN supports, had a letter published in The Financial Times in March calling for the government to act positively.

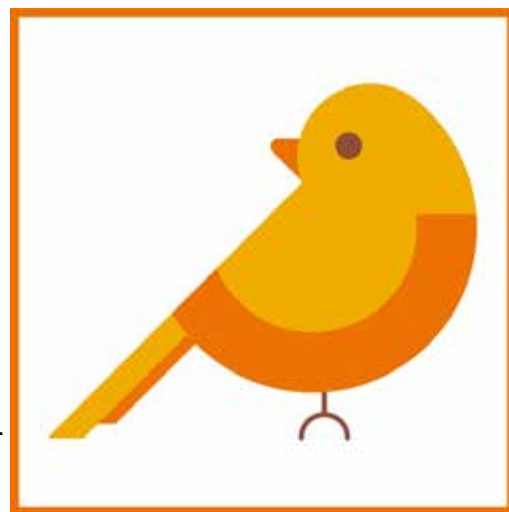
In the letter they call for: *“We urge the Government to grab this golden opportunity to become a world leader and significantly improve air quality by making a transformative, binding commitment in the Bill to meet the WHO’s guidelines for PM_{2.5} by 2030 at the latest.”*

The Government has pledged to set an ambitious target for reducing levels of PM_{2.5}. Anything less than the WHO’s guidelines, which are widely accepted among health experts as an achievable target, and are being called for by many city leaders, would fail to deliver on that ambition and leave millions exposed to toxic air.”

[Click here for a list of signatories](#)

Outdoor worker exposure in London

The British Safety Council (BSC) has been using its phone app, Canary, which measures air pollution – particulate, nitrogen oxide and ozone – and have just published the results. The six-month study is based on 92 Londoners from a variety of job and shows London’s outdoor workers are regularly exposed to pollution above WHO guidelines. The app’s co-creators, King’s College London led on the data analysis.



Further information and the report: <https://bit.ly/2Uggxtt>

Airborne nanoparticles risk greater than thought

A recent BBC article called for a change to the way very small airborne particles are measured as the current method disguises the risk from nanoparticles.

There has been a focus on PM2.5 particles which can enter deep into the lungs, some crossing into the blood stream and further, and the health risks from both. These particles are collected in samples and measured by weight but the article points out that this would include smaller, nanoparticles, which do cross into the body through the lungs and need to be calculated by size and number to estimate any true risk, rather than as they are obscured in the overall weight of PM2.5 samples.

Further information: <https://bbc.in/2wgOwlX>

GJA sets priorities for 2020



People from a wide range of trades unions and environment groups attended the recent Greener Jobs Alliance AGM and recommitted to the central objective of promoting the positive benefits of bringing together trade unions, student organisations and environmental groups.

The 2020 work plan that was agreed identified 3 main priorities.

- Support Green New Deal (GND) bargaining by working with unions to provide resources to incorporate in local regional and national bargaining
- Build the Trade Union Clean Air Network (TUCAN) campaign and continue to raise awareness of the link between air pollution and occupational health
- Identify opportunities for regional projects that support cross-union activity around green skills and related just transition work.



Photo: Mick Holder

GJA sends solidarity greetings to the UCU strikers.

Air pollution shortens lifespan by three years

Research, academics from around the world said air pollution's effect on life expectancy globally was now twice their previous estimates. They now say about 8.8m early deaths a year worldwide are caused by outdoor air pollution and lives can be shortened by almost three years.

If carbon emissions are reduced to zero they estimate people will regain a year's further life, and if all controllable air pollution is cut that figure would rise to twenty months.

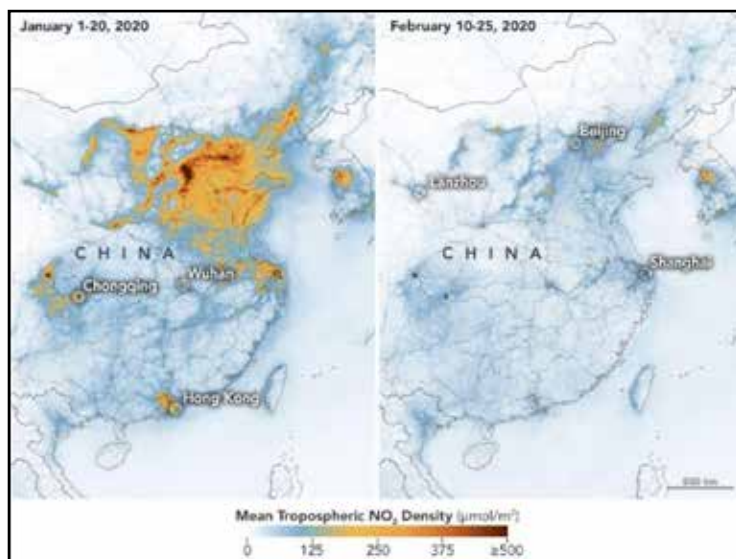
The authors write: *"This corroborates that fossil fuel-generated air pollution qualifies as a major global health risk factor by itself."*

The Guardian news piece: <https://bit.ly/3d91nai>

The Cardiovascular Research paper: <https://bit.ly/3d3ziBr>

NASA shows China slow down reduced NO2 pollution

Recent dramatic pictures from NASA satellites show how the slow-down in industrial activity in China brought on by actions attempting to prevent the advance of coronavirus have dramatically reduced nitrogen dioxide air pollution.



Do you want a TUCAN speaker?

As part of our campaign to help push air pollution and climate change up the trade union agenda locally, regionally and nationally, TUCAN would like to come and talk to interested trade unionists. Whilst we are a small organisation we are hoping to come and talk to trade union workplaces, branches, specialist bodies, trades councils, conferences etc. to promote the issues and our work.

Want a TUCAN speaker?
Contact: Graham Petersen
[gjacom@gmail.com](mailto:gjacoms@gmail.com)

Jacob West (Executive Director of Healthcare Innovation - British Heart Foundation) and Andrew Carter (Chief Executive – Centre for Cities), supported by Kay Boycott (Joint Chief Executive of Asthma UK and British Lung Foundation), Matthew Holder (Head of Campaigns - British Safety Council), Darren Shirley (Chief Executive - Campaign for Better Transport), Ross Matthewman (Head of Policy and Campaigns - Chartered Institute of Environmental Health), Terry Fuller (Chief Executive - Chartered Institution of Water and Environmental Management), James Thornton (CEO – ClientEarth), Paul Tuohy (Chief Executive - Cycling UK), Sarah Vogel, Vice President, Health Program - Environmental Defense Fund Europe), David Muir, Trustee - Environmental Protection UK, Dave Timms (Head of Political Affairs - Friends of the Earth), Chris Large (Senior Partner – Global Action Plan), Dr Douglas Parr (Chief Scientist - Greenpeace UK), Stephen Edwards (Director of Policy and Communications - Living Streets), Xavier Brice (CEO – Sustrans), Graham Petersen (Chair - Trade Union Clean Air Network), Greg Archer (UK Director -Transport Environment), Dr Richard Smith CBE (Chair, UK Health Alliance on Climate Change), and Emma Reece (Government Relations Manager - Unicef UK), Sophie Neuburg (Director - Medact and Doctors Against Diesel).

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