



TY VERLON INDUSTRIAL ESTATE, BARRY, VALE OF GLAMORGAN, **CF63 2BE**, WALES, UK
MAIN TELEPHONE: [+44] [0] 1446 724500 **MAIN FAX:** [+44] [0] 1446 724501
GENERAL E-MAIL: info@lionlaboratories.com **WEB:** www.lionlaboratories.com

From: Dr Paul M Williams <i>International Marketing Director</i> <i>Head of Forensic Support</i>	Direct Fax:	[+44] [0] 1446 724593
	Direct Telephone:	[+44] [0] 1446 724525
	E-mail:	pwilliams@lionlaboratories.com
	Skype:	lionpaulwilliams

DATE: Wednesday, 18 June 2014

YOUR REF: Road Traffic (Amendment) Bill

OUR REF: pmw

Northern Ireland Assembly
Room 247
Parliament Buildings
Ballymiscaw
Stormont
Belfast BT4 3XX

For the attention of the Committee Clerk

Dear Sir,

Road Traffic (Amendment) Bill

I am responding on behalf of Lion Laboratories Limited to your letter of 04 June 2014. Lion are of course the suppliers of breath testing and analysis equipment as used by the Police Service of Northern Ireland. This letter is to give you my views on certain aspects of the above-defined proposed legislation.

1. *Clause Commented Upon*

I am commenting only on **Part 2 Clause 2**, regarding the proposal to reduce the legal drink-drive limit from the current level of 35µg/100ml of alcohol in breath down to 22µg/100ml.

2. *My Qualifications, Background and Experience*

I attach a copy of my *Curriculum Vitae*, which I believe contains the relevant information that you need.

3. *My Comments on the Proposed Reduction of the legal Limit*

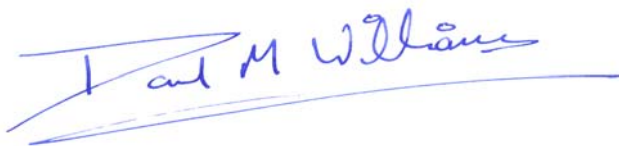
Based on my significant and specialised international experience in this field, I am quite opposed to the reduction of the legal limit [subject to one caveat], for the following reasons:

- a. Most people have no idea whatsoever what 35µg/100ml or 22µg/100ml means in reality: they are meaningless terms to them. The first question generally given is then **“How many drinks does this mean I can have?”**.

- b. Social drinkers [about 90% of the driving population] either drink nothing at all before driving, or if they do drink alcohol then they take so little that their breath level does not exceed about 15 – 20µg/100ml. Above that they do not feel safe: they would not drive: they regard it as irresponsible to do so [as indeed it is]. I have a vast experience that tells me this is so.
- c. The law is there to control those individuals who are **NOT** socially responsible, and so who drink whatever they wish to before driving. There is no evidence whatever that the law changes the behaviour of such people: this is evidenced by the fact the modal breath alcohol level of those prosecuted for drink-driving is around **70µg/100ml**. This is of course twice the existing limit, and, interestingly, is the same in most countries - irrespective of the limit.
- d. An analogy I have used in my lecture on this subject is that of bank robbery. Most people do not rob banks: but that is not because they think they might get caught. It is because most people are socially responsible, and robbing a bank falls foul of their ethics. The law is there to deal with those selfish and irresponsible few who choose to defy the normal moral code.
- e. British Home Office data has shown that about half of those people who are convicted of drink-driving have previous convictions for other criminal offences. I simply do not believe that such people would modify their pre-driving drinking behaviour in response to a lower limit, especially when they are contravening existing laws by so much anyway.
- f. Data in the USA has shown that the average driver with excess alcohol commits the offence once every four days - **before they are caught**. And this is the first key issue in deterrence, the perceived chance of getting caught. The second key issue is that of the severity of the penalties that are enforced by the Courts on conviction.
- g. To reiterate, the deterrent effect to those drink-drivers who are the real problem [that is to say, those with the higher alcohol levels] is the chance of getting caught, **not** a lower alcohol limit [especially so as these people are well over the 35 limit anyway]. This calls for the presence of more Police Officers out on the streets looking for the tell-tale signs of drink-driving, attending incidents quickly, and then dealing with the suspects appropriately.
- h. If the limit is reduced, but with no major increase in Police numbers [my caveat], then the result will be that the number of arrests stays the same [this is defined by the number of Officers on the streets], of which some will be of drivers at the new, lower limit [where the risk of a collision is not as great as it is at higher levels]. The upshot then is that there will be fewer high-level offenders being detected, with a resulting **increase** in collisions. I have actually heard anecdotal but quite reliable evidence that this is precisely what has happened in other countries following a reduction there of their legal drink-drive alcohol limit.

4. Oral Evidence

I am prepared to visit Belfast to give oral testimony to your Committee, if it would be helpful.

A handwritten signature in blue ink that reads "Paul M Williams". The signature is written in a cursive style and is underlined with a single horizontal line.

Dr Paul M Williams
International Marketing Director
Head of Forensic Support

Dr Paul Michael Williams

Head of Forensic Support,

Lion Laboratories Limited

Ty Verlon Industrial Estate

Barry, Vale of Glamorgan CF63 2BE

Wales, United Kingdom

Phone: [+44] 01446 724525

Fax: [+44] 01446 724593

Mobile: [+44] 07785 232826

E-mail: pwilliams@lionlaboratories.com

Skype: lionpaulwilliams



Paul was born in Portsmouth, England, in 1950, and educated at Spring Grove Grammar School, Hounslow, West London, where he was awarded 'A' levels in chemistry, biology and physics. In 1968 he went up to the University of Wales Institute of Science and Technology, Cardiff, from where he graduated in 1971 with an Upper Second Class joint BSc [Honours] degree in chemistry and biology.

From there, in late 1971, still at the University of Wales Institute of Science and Technology, Cardiff, he commenced what was to be a four and a half year research program on alcohol, under the direction of Dr TP Jones; and, initially, alongside the [now] Professor AW Jones. This research work was concerned exclusively and full time with the development of alcohol sensing technology for breath analysis, as well detailed studies into the fundamental principles of alcohol physiology in the human body; and its analysis in breath, blood and urine. During this research period Paul personally carried out many hundreds of experiments on human volunteers - administering known amounts of alcohol to them, and then measuring their breath and blood alcohol concentrations - as well as studying their resulting, changing behaviour.

This alcohol research work resulted in Paul receiving the degrees of MSc and then a PhD in chemistry; plus the development of the fuel cell alcohol sensor that is now used by Lion Laboratories Limited at the heart of their range of **lion alcolmeter**[®] breathalyzers as used by Police Forces in the UK and worldwide for road traffic law enforcement. He has continued this work on alcohol to the present day, full time, during his employment with Lion; now as International Marketing Director and Head of Forensic Support.

He has worked closely with the British Home Office, Crown Prosecution Service and Forensic Science Service; and the Governments of many countries overseas - as well as with the Police Forces and legal authorities in the United Kingdom and elsewhere on various aspects of alcohol analysis in traffic law enforcement. As well as those of the United Kingdom, Paul has also worked closely with the Police Forces, Governments and Forensic Services in Australia, New Zealand, Korea, Singapore, Malaysia, Botswana, South Africa, Cyprus, Malta and Ireland.

He was very much involved in the development of the **lion Intoxilyzer**[®] evidential breath alcohol instruments, as used by Police in the UK and overseas, from a product design standpoint - especially in respect of its user interface software. He also wrote the user handbooks and designed the Supervisor/Instructor training courses as delivered to Police Forces in the United Kingdom and elsewhere. He also works with the Department for Transport, London, in respect of the maintenance and revision of the MG DD suite of drink-drive Proformae as used by the British Police when dealing with drink-drive suspects

Paul regularly gives expert, forensic advice to defence and prosecution lawyers and to the Police in drink-drive matters, and has given expert evidence in Court on now well over 1,900 occasions - mainly in the United Kingdom, but in other countries as well. He has also given expert evidence in a number of civil insurance claim cases, in which the alcohol level of one or both involved parties was an important issue. He now operates his own private consultancy, specialising in the forensic aspects of alcohol.

He has written many articles and has given lectures and papers at many international conferences on matters pertaining to alcohol in the human body. He has often been quoted in the press, and has appeared on many television and radio programmes concerned with this subject. He has carried out training for Police, solicitors, barristers, Magistrates, District Judges and Circuit Judges; as well as medical doctors.

He is a Fellow of both the Royal Society of Chemistry and the United Kingdom Forensic Science Society. He also holds memberships of the British Academy of Forensic Sciences; the United States International Association of Chemical Testing; and the International Council on Alcohol, Drugs and Traffic Safety.

Paul is married to Susan and has one daughter, Charlotte, born 1985 and now a doctor of medicine working in Australia. In his little spare time he enjoys cooking and eating good food; drinking good wine and real ale; photography, crossword and sudoku puzzles; watching [Welsh] rugby union football and cricket; and fly fishing for trout. He lives in Cardiff, South Wales, in the United Kingdom.
