

**From:** Rhys Williams [REDACTED]  
**Sent:** Wednesday, 11 September 2019 1:56 PM  
**To:** [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

**Subject:** Connex-Stacks-VOC  
**Importance:** High

Dear Sir

I am writing to you to express substantial concern in relation to recent events, in particular a recent request to allow a 400% increase in the VOC ventilation outlet limit.

If I may take a moment to outline, as a person not educated in the relevant area but interested-

1. VOC

What is this? It means volatile organic compounds, which due to a low boiling point evaporate or sublime from liquid or solid form and enter the surrounding air. Whilst there are naturally occurring VOCs the ones which relate to the Connex labyrinth are not. Further whilst they may not be acutely toxic in the short term their release and absorption creates short term discomfort and compounding long term health effects.

The short term include eye, nose and throat irritation, headaches, loss of co-ordination, nausea, allergic skin reaction, vomiting, nose bleeding, fatigue, dizziness to name some of the impacts.

For long term the jury is still out but for now they would include damage to liver, kidney and central nervous system, and cancer.

Both the short and long term direct impacts would and will have secondary affectation on those subjected to VOC's including reduced educational outcomes, reduced ability to undertake employment to name a few.

2. VOC reporting

At the same time as the request to allow for a VOC limit increase it was reported on the 12 August this year in the Westconnex facility (M4 East) during maintenance when the auto monitoring system was altered to manual the readings spiked up to the 4mg level.

I would suspect this is not the first time.

A coincidence this and possibly other reporting has come through and now there is a request to modify the allowed levels of toxic substances?

### 3. Earlier RMS and Anzac Park Public School meeting

Some time ago RMS kindly arranged a meeting about the Northconnex project and in particular the location, construction and workings of the motorway stacks.

The RMS had their expert who advised he was 'the' person who knew all about the air quality issues within and without the tunnels and stacks. The NSW Chief Scientist was also there.

The discussion progressed on the basis the background information was accurate , well investigated and beyond criticism with 'modelling' being the best and most accurate method to work out how the future will unfold with the motorway and stacks in operation.

Comments about overseas experience including testing and construction practices were considered not relevant given the expertise used to come up with the modelling and anticipated impacts of the motorway and stacks.

Then we were told if ultimately the modelling was wrong and the actual impact was not good then the issue would be fixed, when and how that would happen was not spelled out but the comments did not provide any confidence the future would be quickly fixed.

Now we are asked to accept there was a transcript error in the amount of VOC's to be allowed, I may be slow but given all that was said at that meeting I and others would find that hard to believe. Given that meeting discussion one must consider the possibility original assessment was wrong and with these reports of spikes in current motorway tunnels the Government is now trying to correct its modelling.

### 4. The Modelling basis for deemed future impacts

If one progresses further and the proposed change to VOC limits, be it a 'transcript error' or deliberate change, must raise serious questions about the whole modelling process which underlies the proposals made for the construction and maintenance of the motorways and stacks.

With all seriousness how can any of it be relied upon going forward if there is such a fundamental error made with such a central figure relating to something that may have substantial short and long term adverse impacts on the surrounding population.

Does the Government need to go back to the drawing board and start again to adequately convince us all what is proposed is safe?

Until they do, there should be no piecemeal changes (upping the VOC limits) to the material the Government wants to put forward to justify its proposals.

## 5. Other factors

It is unclear how far the Government has factored in recent external events within its proposals and modelling to ensure it is adequately covering all aspects to provide comfort to the population that its proposals will not cause damage, in particular-

### a. climate change

With the threat of climate change and the known/unknown impacts going forward has the Government allowed for the possible adverse effects of VOC's at the 'fixed' higher levels if the future climate position results in them not dissipating far away as stated, the experts at that meeting were less than convincing that had really been taken into account.

### b. the Volkswagen/Toyota impact

We have two of the world's largest motor vehicle manufacturers deliberately flouting their vehicles pollution impact, I assume the Government's modelling is based on those companies' results and their meeting the pollution requirements, which as we know did not happen in all cases.

I do not know if this ideology extends to others but it should mean the Government makes generous allowances for what might be spewing out of vehicles.

If the Government is unable to clearly set out that it has properly taken into account factors like these then it needs to go back and start again, not try a piecemeal approach, as it is here, to sorting things out.

#### 6. Filtration/On sale

The experiences of overseas facilities and the uncertainty (given amongst other things the need to dramatically increase the VOC limits) and lack of confidence in the modelling supporting the proposals for motorways both now and in the future as well as the potential risks to current and future generations health wise it is extremely difficult to rationalise not including filtration in the stacks, both upgrading existing facilities and installing in new ones.

Unless of course the Government contractually cannot fix what it has sold and does not want to make the on sale of future projects unpalatable because they have ongoing maintenance costs with proper filtration.

Having raised those points I would respectfully submit-

With this request to modify the VOC's allowed limits the whole process and review of current systems is required to be done and completed without fear or favour, not looking to a future on sale and properly considering all issues before this request can be properly and/or appropriately considered.

Regards

Rhys Williams