



COMMITTEE SUPPORT

Standing Committee on Public Accounts

**Inquiry into Annual and Financial Reports 2021-2022**  
**ANSWER TO QUESTION ON NOTICE**

Asked by: Elizabeth Kikkert

Reference: Hearing on 4 November 2022, Annual Report of Treasury.

In relation to: Icon Water Odour Control Units

1. In a letter to me earlier this year, the Chief Minister wrote that, in addition to painting murals on the odour control units, 'Icon Water may also be able to reduce visual impacts with plantings' (11 Jan. 2022). Are plantings currently part of the planning, and if not, can they be considered later if residents come to realise that they want them?
2. Regarding these four new OCUs, the Air Quality Impact Assessment for this project states that 'the predicted 3-minute average odour ground level concentrations ... for the 99.9th percentile was less than 1 OU at all modelled sensitive receivers', with the highest predicted average being 0.6 OU (p. 42). My understanding based on this statement as well as the information in paragraph 5.2.5.1, is that, even if the modelling turns out to be 100 per cent accurate, odour from these units may nevertheless reach 1 OU and therefore be detectable for short periods of time, influenced in part by the variability of meteorological conditions. Is this a correct conclusion, and if not, how is it not?
3. Since even the modelling suggests that bad odours may be detectable near odour control units on rare occasions, why does the Icon Water Factsheet that was distributed to residents and can be found online state that the units, quote, 'are designed to treat odours, so they do not smell'? Would it not be more accurate to tell residents that the units have been designed to very rarely smell?
4. When the three OCUs in West Macgregor were brought up during the hearing, Mr Hezkial said in relation to bad odours being detectable from these units, 'I acknowledge that. We've learnt a lot from that particular incident'. When did Icon Water first acknowledge that the West Macgregor OCUs were emitting odours detectable to nearby residents, and what lead Icon Water to investigate this possibility?
5. In the hearing, Mr Hezkial said that Icon Water has 'reviewed our maintenance practices to make sure that we're a little bit more on top of that [bad odours]' and mentioned more frequent and/or 'proactive' replacement of carbon filters. Under previous maintenance practices, how frequently were OCU filters in West Macgregor changed, how frequently are

they changed now, and when did this alteration to maintenance practices commence?

6. Do the OCUs in West Macgregor still emit detectable odours, and if so, what are the estimated frequency and duration (including time of year, time of day, etc.)?
7. In the hearing, Mr Hezkial mentioned looking at instrumentation in order to detect the emission of bad odours before residents can notice them and make a complaint. Is this a reference to sensitive receivers and/or to some other kind of instrumentation?
8. Did the OCUs in West Macgregor have sensitive receivers (or similar instrumentation) when first constructed, and do they have them now?
  - a. If they were added later, when were they added?
  - b. If the West Macgregor OCUs do not have sensitive receivers (or something similar), why not?
9. In the hearing, Mr Hezkial stated that 'some of those lessons [from the West Macgregor OCUs] have already made their way into the design of the new odour control units'. In summary, what are all the 'lessons' from the OCUs in West Macgregor that have been integrated into the designs for the four new OCUs being constructed as part of the Belconnen Trunk Sewer Upgrade?
10. Considering that Mr Hezkial said 'some of those lessons', what lessons from the West Macgregor OCUs have not been integrated into the designs for the new OCUs?

**Andrew Barr MLA:** I have sought advice from Icon Water Limited and the answers to the member's questions are as follows:–

1. The Odour Control Unit (OCU) sites will be revegetated in accordance with TCCS approved Landscape Plans and typically will involve the replanting of new native trees at a ratio of 2:1 (new vs removed trees). This will provide additional screening of the sites and will complement the mural artwork that has been commissioned. The location of the plantings has been chosen to maximise screening while also addressing Icon Water's access and asset protection requirements.
2. The definition of 1 Odour Unit is the detection threshold where 50 per cent of a trained odour assessment panel will determine that an odour from a source exists as determined in laboratory settings through dynamic olfactometry. There are numerous complexities as to how this manifests in the perception of odour in the environment and the regulatory standard of 2OU, 3 minute average, 99.9th percentile has been set to provide a high level of confidence that nuisance odours are unlikely to occur below this amount.
3. The OCUs are designed to treat odours so as not to smell. Odour is unlikely, and Icon Water want it to be reported to them should it be noticed. Apparent odour may indicate a fault or blockage on a wastewater asset, so Icon Water appreciates the opportunity to investigate and address any issues identified. The factsheet was intended to provide a high-level introduction to the OCUs to complement community engagement efforts. The fact sheet points to the website where there is greater detail relating to air quality assessments, compliance, frequently asked questions and a link to the Environmental Impact Statement submission. In reflecting on the wording included in the fact sheet, although not incorrect, Icon Water accepts that it could be clearer in that odour should not be noticed at nearby residences. Whereas odour may be noticed in the immediate vicinity under certain circumstances.

4. In November 2019, correspondence from Ms Kikkert MLA identified constituent concerns about the West Macgregor OCUs. Increased monitoring occurred following receipt of this correspondence in 2020 and a project has since been initiated to update the capability and reliability of monitoring of all OCUs, including West Macgregor units.
5. The West Macgregor odour filters were previously changed as per a schedule set out at their design. This was appropriate at the time of their design and first few years of operation but did not take into consideration any changes to the quality and composition of the gases in the sewer system over the life of the asset. The OCUs are now maintained based on a calculation which uses up to date data to predict when a filter needs to be changed as well as monitoring at the unit.
6. The OCUs are designed to treat odours to minimise odour impact. When operating as designed odour is unlikely. The performance of the OCUs are continuously monitored and are currently operating within specification.
7. Icon Water currently has a project to update the monitoring capabilities of all its OCUs, including the West Macgregor units. This is a reference to instrumentation to be placed within the OCU.
8. As mentioned in the Q7 response, Icon Water currently has a project to update the capabilities and reliability of monitoring of all its OCUs, including the West Macgregor units. This is happening to employ more modern and updated instrumentation and to bring these units up to Icon Water's current standard which was developed after the West Macgregor OCUs were constructed and has been used for the design of the Belconnen trunk sewer and Molonglo Valley Interceptor Sewer OCUs.
9. A design standard has been developed subsequent to the assets being gifted to Icon Water. These standards have used input from other utilities as well as our own experiences operating several odour control units across Canberra. Lessons requiring site alterations related to safety, reliability and efficiency are being addressed in the project mentioned in the response to Q7.
10. As stated in the response to Q9, Icon Water has developed a design standard for OCUs which has been employed for the Belconnen trunk sewer OCU projects. These standards are to be used as a concept design with detailed design to be site specific and some deviations required. As the Belconnen trunk sewer OCUs are in a different environment, they have different requirements as determined through computer modelling so not all lessons from previous designs will be applicable.

Approved for circulation to the Standing Committee on Public Accounts

Signature:



By Acting Treasurer, Yvette Berry MLA

Date:

18/11/22