

Hunter Water's responses to questions from Department of Planning and Environment dated 18 January 2017 regarding the Tenambit seniors living proposal

1. The proponent has made a decision for their land based on the information contained in the 2014 REF for the earlier works on the facility, Stage 2 Hydraulic Upgrade. This provided sufficient capacity for future growth in the catchment and does not indicate any further expansion plans. They were therefore sceptical of future upgrades that may be required, their timing and their impact on the adjacent property. I explained that we had seen sufficient evidence of such plans but that this material was confidential.
 - a. Can you comment why future expansion plans (described as items 2 and 3 in your email below) are not publically known – or if they are point me to the source.

Hunter Water does not keep a public record of all future plans. Hunter Water's pricing submission to IPART for each price period is publicly available. The submission includes the proposed capital works program for the next price period, which in this case is 2016-17 to 2019-20. The biological treatment plant upgrade (which you refer to as item 3 in the email from David Derkenne dated 12 December 2016) is intended to be delivered around 2020-2025 so it sits outside the next price period and is therefore not explicitly listed in the submission to IPART. Hunter water expects that the business case for the biological treatment plant upgrade will be completed in 2020. From that point in time, Hunter Water will finalise the scope of the upgrade, assess the likely impacts and carry out the works to the point of delivery. As previously advised, the biological treatment plant upgrade has been proposed for some time, but action has been deferred because actual growth rates have not been as strong as those projected in 2006.

The proponent has referred to environmental assessments in 2009 and 2014 (including air quality assessments dated 2008 and 2013) prepared for Hunter Water and was therefore aware before lodging its application that the WWTW will need to be upgraded. While the works proposed in the 2009 assessment did not proceed, the assessment generally considered several of the currently planned components. The 2014 assessment does address the potential impacts arising from the inlet works (item 1) and the 2009 assessment includes a recycled water treatment scheme (that is similar to the proposal listed as item 2 in the email from David Derkenne dated 12 December 2016).

The proponent does not say whether it requested further information from Hunter Water or otherwise sought to obtain information about Hunter Water's future plans. It is nonetheless clear from the available environmental assessments, Hunter Water's buffer zone policy and a letter sent by Hunter Water to the proponent on 2 August 2016 that Hunter Water had future plans for the site and would object to additional residential development in the area on the basis of odour impacts.

- b. Can you also please comment on whether the additional upgrades at the facility (Recycled water treatment plant and Biological treatment plant) typically have the potential to increase odour impacts. I appreciate that this would be subject to detailed assessment at the time the upgrade was proposed but the suggestion is that future upgrades will not change the odour contour.

The proponent has access to an air quality assessment undertaken for Hunter Water in 2008. That assessment provides:

The recycled water plant will involve the treatment of a side stream of secondary treated effluent from the Morpeth WWTW through an advanced tertiary treatment process. The process will include membrane filtration followed by a series of additional disinfection

processes. As the recycled water plant infrastructure will be primarily housed in a building and odours are not expected to be emitted from the plant, the only air quality assessment required for the recycled water plant relates to emissions of chlorine on the WWTW site.

The additional upgrade to the biological treatment plant will have the potential to increase odour impacts. A detailed assessment of the likely impacts will be made during the planning stage of the upgrade to ensure impacts are acceptable with or without mitigation measures. Increased residential development surrounding, and closer to, the plant will increase the following risks for Hunter Water:

- (a) Hunter Water may not be able to carry out the upgrade at all because of likely odour impacts at the proposed residences, even taking into account potential mitigation measures.
- (b) Hunter Water may need to deliver additional and unfunded odour control measures compared to the likely impacts based on current land use.
- (c) The cost of mitigation measures to reduce the level of impacts at the nearest residences (which are proposed right along the boundary of the WWTW land) might mean that the upgrade is not feasible.

It is not only the fact that residences will be closer to the site, but that the increased number of residences will affect the applicable odour assessment criteria, which depends on the population of the affected community. The significant increase in population proposed by this development will result in more stringent odour criteria applying to the WWTW in the future. This density of development was not anticipated given the rural zoning of the land.

The proposed development takes into account the modelling to date, which assesses odour at the nearest residences (not at the boundary to the WWTW site). The assessment confirmed that the WWTW upgrade was acceptable because the existing residences are *well outside* the 2OU contour. The proposed development does not take into account the purpose and focus of the modelling.

Residential buildings (and potentially future residential lots) are now proposed along the 2OU isopleth as presented in the modelling, as if that is a clear line where odour impacts will cease. Planning for future development in this area must take into account that odour impacts can fluctuate, detection and odour annoyance can vary between individuals and odour modelling is not an exact science. The proposed development does not leave any room for these variations and is likely to result in increased odour nuisance complaints from local residents. These residents will be buying new dwellings, with the expectation that there will not be such pre-existing conditions and this will likely contribute to odour annoyance and subsequent complaints.

In Hunter Water's view, an increased buffer between dwellings and the boundary to the Hunter Water land, as well as a reduced number of residential buildings, will lessen the risk of ongoing land use conflict. This is consistent with the current rural zoning of the land and expectations of landowners in rural zoned areas. The State Environmental Planning Policy (HSPD) does not (and should not) give rise to a general expectation that seniors housing development will be permissible on rural zoned land that is adjoining (in this case across the road from) land that is zoned for residential purposes. The Secretary is required to assess whether the land is "suitable for more intensive development" and the proposed seniors housing development "is compatible with the surrounding environment". In this circumstance there are pre-existing land uses that are consistent and compatible with rural land uses but that will conflict with more intense residential land

development. Hunter Water maintains its submission that the land is not suitable for the use as currently proposed.

2. Any future upgrades could be accommodated on land further away from development, to the east of the site, on land that is not flood liable – noting that this land was not owned by Hunter Water and would need to be purchased. I expect that Hunter Water's concerns are that this would increase the cost associated with these necessary upgrades.
 - a. Any comment?

This would increase the cost associated with these necessary upgrades. In any event, an assessment has not been undertaken to determine whether that land is suitable in all respects for the works.

3. Any limitations to the use of their land for Hunter Water activities should require acquisition of the affected land.
 - a. Can you comment on whether Hunter Water has a policy in relation to this.

Hunter Water does not have a policy in relation to this issue. It should be kept in mind that Hunter Water's powers to compulsorily acquire land are not unfettered. Hunter Water may only acquire land for the purposes of its functions under the Act and must obtain the consent of the Minister for Energy and Utilities to do so. Consideration should be given to when the proponent purchased the rural zoned land and whether the WWTW existed at the time of that purchase. As Hunter Water has advised the proponent, there are rural land uses that are entirely consistent with and will not be affected by the WWTW. There is no reason why the land cannot be used in accordance with its current rural zoning.

Finally I am aware that they have a DA (with Maitland City Council) for a manufactured home estate on the same parcel of land, can you advise if that has been submitted to Hunter Water for review and if possible provide me with a copy of your response.

Hunter Water would, and will, respond to a manufactured home estate proposal in the same way it has responded to the seniors living proposal. Both proposals introduce increased sensitive odour receptors on lands immediately adjacent to an operational wastewater treatment facility, without any separation from the existing WWTW site. Both proposals increase the risk of odour complaints and the need for Hunter Water to deliver additional and unfunded odour control measures in connection with its current and intended use of the land.

Both proposals ignore the rural zoning of the land and the objectives of the RU2 Zone in which the land is located. These include (our emphasis added):

- To maintain the **rural landscape character** of the land.
- To provide for a range of **compatible land uses**, including extensive agriculture.
- To provide for a range of non-agricultural uses where infrastructure is adequate to support the uses **and conflict between different land uses is minimised**.

Both proposals also ignore the importance of the Hunter Water infrastructure in the locality and the need to ensure that infrastructure (which is permissible on the land under *State Environmental Planning Policy (Infrastructure) 2007*) is adequate to service the needs of the local community.