



14 November 2011

Mr Kane Winwood  
Major Projects Assessment  
Department of Planning & Infrastructure  
GPO Box 39  
**SYDNEY NSW 2001**

### **Brooklyn Wastewater Treatment Plant**

Dear Mr Winwood,

I understand that Sydney Water lodged a modification application with the Department of Planning and Infrastructure on 15 September 2011 to change the effluent quality limits for ammonia, total phosphorous and total Nitrogen identified in condition of approval no. 63 of the Brooklyn and Dangar Island Sewerage Scheme.

This will have a direct impact on the quality of effluent discharged directly into the Hawkesbury River.

I am writing to raise a number of questions which remain unanswered and state my opposition to the proposal in its current form. The following issues need to be addressed before it can be considered.

1. Impact of future development - The current report fails to take into consideration the impact of future discharges. Modelling provided is based on pre 2009 assumptions which do not include potential future development. Any reasonable model would account for the impact of future growth.
2. Assumptions and verification of modelling - There is a serious lack of detail provided by Sydney Water in the modelling. The information appears very basic and the detail is far from clear. I would like Sydney Water to confirm effluent compliance at the 150m dilution zone under the current development as of 2011. There is no confirmation in the report that the STP is currently meeting targets using current discharge data. In addition, Sydney Water should demonstrate a scenario effluent compliance at the 150m dilution zone that represents the potential development under the proposed scheme (option 3). I cannot understand how Sydney Water think we should make a decision without providing such information.
3. Comparative Data - Sydney Water have not provided any comparative data regarding STP discharge from other sewerage schemes. If the dilution levels at say North Richmond STP or Hornsby Heights STP are lower than Brooklyn then what is the justification for the higher levels proposed? In addition, there is no data available for comparison of the river pre and post the Brooklyn STP (ie taking into account the removal of Septics etc). Can Sydney Water demonstrate that the Brooklyn Estuary has improved in water quality since the commissioning of the STP?



4. Future Monitoring - There is no mention of how Sydney Water plans to ensure that water quality will not be compromised following this amendment. The community needs to know that appropriate systems and processes will be in place to ensure that the quality of the River is not deteriorating as a result of their proposal. What is Sydney Water's plan for ongoing monitoring and assessment?

The Hawkesbury River is one of Sydney's most beautiful and picturesque waterways. It is home to a diverse range of aquatic flora and fauna, commercial fishing and oyster industries, and a favourite recreational spot for people right across our state. This River is too important to compromise, especially considering the incomplete information which has been provided.

Section 3 of the report says that the reason for modification is that the "higher than anticipated quantities of ferric chloride required to remove phosphorous have fouled the membranes". Section 3.1.3 of the report states that the ferric chloride has caused the "ultra filtration membranes at Brooklyn WWTP required replacement after just three years instead of the expected 10 years."

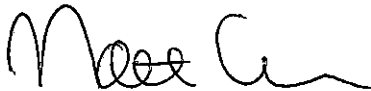
This raises the serious question of whether or not the STP has met its specifications including membrane replacement, chemical consumption and energy use.

The NSW taxpayer and the residents of my community should not be penalised for failure to construct the plant in line with the original specification. This is an engineering problem requiring an engineering solution.

I would encourage the Department of Planning and Infrastructure to reject this proposal and provide an engineering solution which will not result in a lesser quality of effluent being discharged into the Hawkesbury.

Thank you for your consideration of this matter.

Yours Sincerely,



Matthew Kean MP  
**Member for Hornsby**