

Submission to the Independent Pricing and Regulatory Tribunal's Draft Report Review of prices for Sydney Water Corporation – 1 July 2016 to 30th June 2020 regarding North Head Sewage Treatment Plant Biosolids Amplification Project.

I have carefully considered the Draft Report and have come to the conclusion that the recommendations made by Atkins Cardno do not adequately address the problems facing Sydney Water at its North Head Sewage Treatment Plant.

Sydney Water has proposed two additional digesters for the biosolids amplification project cost \$40.1M and I strongly recommend that their proposal should be approved.

Sydney Water implemented recuperative thickening in 2010 to increase the capacity of the digesters to increase solids retention time at North Head. In 2015, the solids retention time remains at 20 days the same as it was in 2008 before recuperative thickening commenced at North Head. [1 & 2]

Two additional digesters would provide increased solids retention time for the volume of solids the plant presently treats to destroy the volatile solids responsible for biosolids odours. Approximately 30% of solids are captured from the influent.

Also, two digesters would allow the two sedimentation tanks which are currently not used, to be used to reduce the risk of the plant exceeding the NSW Environment Protection Authority's Licence 378 for discharge concentration of solids to coastal waters.

To use the two extra sedimentation tanks without additional digesters would increase the sludge load to the digesters thereby reducing digester solids retention time at the plant's current digester capacity and aggravate biosolids odours.

Sydney Water has recorded that 'the discharge of suspended solids from North Head Plant is near to licence limits'.

The increased odours emitted from North Head Sewage Treatment Plant due to the commencement of the new biosolids facility in September 2007 were outrageous. Air pollution impacted people in nearby recreation areas, schools, their homes, cafes and on the streets. The odours remain at an unacceptable level.

Trucks with tarpaulin covers currently transporting biosolids from North Head STP to the disposal facility continue to emit biosolids odours plus deodorant at an unacceptable level trailing along behind the truck and lingering in the air.

I am also concerned about the quantity of microplastics that are finding their way into the world's oceans and the extent to which discharge to the ocean from sewage treatment plants is contributing to this already serious problem. EPA's New South Wales State of the Environment 2015 records, options for government to address emerging issues will continue to arise including:

- "Options for minimising microplastic in the marine environment"

I hope that option will be an objective in IPART's approval process for expenditure for Sydney Water's North Head Sewage Treatment Plant.

In conclusion, I repeat my recommendation that Sydney Water's North Head Biosolids Amplification Project cost \$40.1M for two additional digesters should be approved to improve plant performance, reduce biosolids odours and benefit by extension, the community.

Beverley Trevenen
18th April 2016

1. SWC consultant [REDACTED]
2. SWC Plant Manager May 2015