

Incitec Pivot Limited  
Environment Protection Licence: 11781  
39 Heron Road, Kooragang Island, NSW

Date Data Published: 13 February 2014.  
Date Sampled: December 2013  
Date Sample Results Obtained: 29 January 2014.

## Notes on Monitoring Data

In relation to the monitoring data above, IPL notes that:

- As part of ongoing Licence reviews the NSW EPA has varied the suite of pollutants for which monitoring is required under condition M2.2 so it may further assess the bioavailability of nutrients within the stormwater discharging the site. The data tables have been updated accordingly.
- The automatic samplers only trigger when a specified volume of rainfall has occurred.
- Prior to analysis of collect stormwater samples “composite stormwater samples” are produced. Composite sampling consists of a collection of numerous individual discrete samples collected in a common container over a sampling period. Composite samples are collected from the discharge point and sent for analysis.
- The stormwater sampling on site has a tidal influence. As the tide changes to a high tide in Newcastle harbour the harbour waters enter the stormwater pipes and flow back onto the Incitec site. When a high tide coincides with a rainfall event the automatic samplers trigger and a sample is collected. However, the collected sample is then contaminated with harbour water and is not representative of the stormwater discharging from site. Collected stormwater samples that coincide with high tides are currently discarded and not analysed. IPL is currently investigating works to remove the tidal influence.
- EPA Licence 11781 sets no specific pollutant limit on the site’s water discharges. As such IPL must comply with the general obligation not to cause off site pollution under s120 of the POEOA.
- The IPL site is an old site which has been in operation for many years and the stormwater system does not collect surface run off the way that new sites are designed to do. Nonetheless, IPL recognises that it needs to improve its stormwater management to bring it in to line with modern requirements. To that end IPL has entered a number of Pollution Reduction Programs with the NSW EPA in relation to stormwater management. A range of activities are being conducted on site to reduce the pollutant load in stormwater leaving the Kooragang Island site.

### North Drain Storm Water Drainage Analysis (EPL1)

Pollutant	Units of Measure	Monitoring Frequency Required	No of Samples Analysed in month	Min Value	Mean Value	Median Value	Max. Value
pH	pH Unit	Monthly during discharge	0				
Total Suspended Solids	mg/L	Monthly during discharge	0				
Sulfur as S	mg/L	Monthly during discharge	0				
Sulfate as SO <sub>4</sub>	mg/L	Monthly during discharge	0				
Zinc (Dissolved)	mg/L	Monthly during discharge	0				
Zinc (Total)	mg/L	Monthly during discharge	0				
Ammonia as N	mg/L	Monthly during discharge	0				
Nitrite as N	mg/L	Monthly during discharge	0				
Nitrate as N	mg/L	Monthly during discharge	0				
Nitrite & Nitrate	mg/L	Monthly during discharge	0				
Total Kjeldahl Nitrogen as N	mg/L	Monthly during discharge	0				
Total Nitrogen	mg/L	Monthly during discharge	0				
Phosphorus (Total) as P	mg/L	Monthly during discharge	0				
Phosphorus (Reactive) as P	mg/l	Monthly during discharge	0				
Phosphate (Calculation from Total P result)	mg/L	Monthly during discharge	0				
Sulfide (Dissolved) as S <sub>2-</sub>	mg/L	Monthly during discharge	0				
Sulfide (Total) as S <sub>2-</sub>	mg/L	Monthly during discharge	0				

### Central Drain Storm Water Drainage Analysis (EPL 7)

Pollutant	Units of Measure	Monitoring Frequency Required	No of Samples Analysed in month	Min Value	Mean Value	Median Value	Max. Value
pH	pH Unit	Monthly during discharge	0				
Total Suspended Solids	mg/L	Monthly during discharge	0				
Sulfur as S	mg/L	Monthly during discharge	0				
Sulfate as SO <sub>4</sub>	mg/L	Monthly during discharge	0				
Zinc (Dissolved)	mg/L	Monthly during discharge	0				
Zinc (Total)	mg/L	Monthly during discharge	0				
Ammonia as N	mg/L	Monthly during discharge	0				
Nitrite as N	mg/L	Monthly during discharge	0				
Nitrate as N	mg/L	Monthly during discharge	0				
Nitrite & Nitrate	mg/L	Monthly during discharge	0				
Total Kjeldahl Nitrogen as N	mg/L	Monthly during discharge	0				
Total Nitrogen	mg/L	Monthly during discharge	0				
Phosphorus (Total) as P	mg/L	Monthly during discharge	0				
Phosphorus (Reactive) as P	mg/l	Monthly during discharge	0				
Phosphate (Calculation from Total P result)	mg/L	Monthly during discharge	0				
Sulfide (Dissolved) as S <sub>2-</sub>	mg/L	Monthly during discharge	0				
Sulfide (Total) as S <sub>2-</sub>	mg/L	Monthly during discharge	0				

## Southern Drain Stormwater Drainage Analysis (EPL 2)

Pollutant	Units of Measure	Monitoring Frequency Required	No of Samples Analysed in month	Min Value	Mean Value	Median Value	Max. Value
pH	pH Unit	Monthly during discharge	0				
Total Suspended Solids	mg/L	Monthly during discharge	0				
Sulfur as S	mg/L	Monthly during discharge	0				
Sulfate as SO <sub>4</sub>	mg/L	Monthly during discharge	0				
Zinc (Dissolved)	mg/L	Monthly during discharge	0				
Zinc (Total)	mg/L	Monthly during discharge	0				
Ammonia as N	mg/L	Monthly during discharge	0				
Nitrite as N	mg/L	Monthly during discharge	0				
Nitrate as N	mg/L	Monthly during discharge	0				
Nitrite & Nitrate	mg/L	Monthly during discharge	0				
Total Kjeldahl Nitrogen as N	mg/L	Monthly during discharge	0				
Total Nitrogen	mg/L	Monthly during discharge	0				
Phosphorus (Total) as P	mg/L	Monthly during discharge	0				
Phosphorus (Reactive) as P	mg/l	Monthly during discharge	0				
Phosphate (Calculation from Total P result)	mg/L	Monthly during discharge	0				
Sulfide (Dissolved) as S <sub>2-</sub>	mg/L	Monthly during discharge	0				
Sulfide (Total) as S <sub>2-</sub>	mg/L	Monthly during discharge	0				

