



## **DIRECTOR SHIRE SERVICES REPORT**

13 March 2007

**DSS4 HAT HEAD SEWERAGE  
FILE: 217 AMB/PGA (NRN) CC:APC {Folio No. \*}**

### **SUMMARY**

Reporting on the Hat Head Sewerage System.

◆◆◆◆◆

### **DESCRIPTION:**

This report is provided in accordance with Council resolution (2006.727) and provides an update on the Hat Head Sewerage Scheme.

### **Sewerage Treatment Plant**

On the 15 August 2006, the Defects Liability Period (DLP) expired. Of the eleven (11) items identified at the end of the DLP two (2) main items remain as outstanding and these are listed below. These remaining outstanding items are of enough significance to affect the capacity and normal operations of the plant. One of the three items reported in November, the Chlorine tank has been installed and will be commissioned as soon as the bulk delivery of chlorine is delivered on site.

The table below provides a brief outline of the outstanding items.

**Table 1: Outstanding Items as per Defects Liability Period**

<b>Item</b>	<b>Action</b>	<b>Timeframe</b>
Decant floats tilting during aeration in digester & storage tanks	Contractor to address	Unsuccessful rectification trial occurred during September and October. Contractors for Tenix were onsite October 30-31 to install additional tethers on each float. Tilting has been rectified to some degree with the extra tethers, but trails have shown the draw off of liquid from the floats has some limitations.
Inlet works overflowing	To be rectified by contractor	An inlet pipe modification was constructed and trialled through September and October and was unsuccessful. There was a further on-site investigation visit by Tenix on 31 October. Another inlet pipe

Item	Action	Timeframe
		modification (redirection) has now been constructed and will be monitored over the Easter period for correct operations.

In addition to the defects outlined in table 1 the plant received an expected large inflow over the Christmas / New Year period as can be seen in Table 2. The combination of the inflow loading and the remaining defects put a considerable loading on the plant and serious storage and process issues arose, leading to a Licence breach. Concurrently, the inlet works overflowed with every operation of the pump station (several times per day).

The DLP has been extended whilst the outstanding defects are being resolved.

**Table 2: Inflow received at Plant**

Period	Inflow Volume	Average Flow Per Day
Peak Period 21/12/05 To 10/1/06	4,619kls	220kls
Peak Period 21/12/06 To 22/1/07	4957kls	236kls
Off Peak Period 2/8/06 To 22/8/06	1,461kls	69kls

It has been determined on a risk management basis that the permanent shade structure is required and an order has been placed for the supply and construction of a permanent weather structure over the chemical tanks. The benefit will be two fold as the structure will protect the tanks from the heat, (maintaining the strength of the chemicals) and limit the rain water falling into the "Chemical Bunded Area". It was visually identified in the last few months that rainfall events were filling these chemical spill bund areas to overflow. The environmental risk posed was deemed unacceptable should an emergency situation occur. The structure will be constructed in April this year.

### **EPA Licence**

There were two licence non-compliance events since the last report with limits for Faecal Coliforms, Ammonia & Total Nitrogen (90%) over the peak period being breached. As noted from Table 2 the extra load and the two out standing defects contributed to these breaches.

### **Sewerage Pumping Station**

Macleay Water is now in the process of releasing bonds back to the head contractors (New England Excavations). Since the last report, Macleay Water has received outstanding monies owed by Flowvac (a subcontractor of New England Excavations)

### **REPORT IMPLICATIONS:**

- **Environmental**

*When running efficiently and when all customer connections are complete the sewerage system will improve the environment of Hat Head. The improvement within the reticulated area should now be evident and will continue to improve.*

- *Social*

*The moratorium on the future development in Hat Head under DCP 37 continues whilst DLP issues are being resolved. Customer connections remain at approximately 96%.*

- *Economic (Financial)*

*The cost of defect rectification is the responsibility of the contractor.*

- *Policy or Statutory*

*Nil*

- *Director's Review*

*Contractual obligations / requirements are being followed to resolve the outstanding matters*

**RECOMMENDATION:**

- 1 That the information be noted.
- 2 That a further report be provided to Council in July 2007.

.....  
**A P Vermeulen**  
**DIRECTOR SHIRE SERVICES**