



## **DIRECTOR SHIRE SERVICE'S REPORT**

9<sup>th</sup> August 2005

**DSS17 HAT HEAD SEWERAGE  
FILE: 217 DWH (NRN) {Folio No. \*}**

### **SUMMARY:**

Reporting on the operation and maintenance of the Hat Head sewerage system.



This report is provided following Council's resolution and updates the previous reports regarding operation and maintenance of the Hat Head Sewerage Scheme.

### **Amenities Block - Hat Head**

- A quote has been accepted, with work to commence early August, to re-connect the Amenities Block sewer line to the large sewerage collection pit near the shelter shed.
- On the first of June Macleay Water requested Airvac to carry out a test on the Caravan Park sewer vacuum system lines to check their ability to handle design flows. This will allow fine tuning of the vacuum pumps to ensure maximum capacity of flow through the system. This has now been completed and results prove the system works in accord with design specifications.

### **Sewerage Treatment Plant**

A Process Engineer from U.K.G arrived on site on the 26<sup>th</sup> July to begin providing continued on-site support for a period of no less than a month. Any items still outstanding will be actioned by him. Modelling of the plant capacity already undertaken suggests that below design capacities flows are having a greater destabilising effect than anticipated and that a possible solution is to decrease mixed liquor concentration in an effort to provide more stable effluent nutrient levels.

U.K.G anticipate that direct daily support to the plant will ensure effluent discharged is compliant with contractual and regulatory criteria. They also feel that such intensive support will provide

sufficient base-line data on which to model the continued successful operation of the plant.

The following items on the agenda are also to be addressed:

- Repair of Digester Floats
- Repair of the supernatant valve
- Repair of one Chlorine pump

## **Sewerage Pumping Station**

Airvac contacted regarding a 12mm wear plate retaining bolt broken. This was replaced by Macleay Water fitters, and the pump is back on line and operating satisfactorily.

## **Dune Disposal.**

No current problems with effluent disposal.

## **EPA License compliance.**

Results have been assessed to the 100<sup>th</sup> percentile of the EPA Licence operating criteria the results shown below:

	O & G	pH	TN	TP	F Coli	NH4-N	TSS	BOD
<b>28/06/2005</b>	0.50	6.15*	18.28	0.24	1.00	2.17	10.00	2.70
<b>12/07/2005</b>	0.50	6.67	29.65*	0.31	1.00	17.07*	8.50	1.00
<b>100% ILE</b>	6	6.5-8.5	20	1	600	5	30	20

United Kilpatrick Green (UKG) investigated instances of non-compliance (indicated \*) in an effort to gain greater process stability. Changes to the plant over the last month have been relatively minor.

As the results indicate Nitrogen, Ammonia and pH have exceeded the 100% percentile licensing criteria over the last month. U.K.G. have now committed a Process Engineer to work on site for a minimum period of one month in an attempt to fine tune the plant operations.

### ***REPORT IMPLICATIONS:***

- ***Environmental Implications***

***When completed and running efficiently the sewerage system will improve the environment of Hat Head.***

- ***Social Implications***

***The moratorium on future development in Hat Head under DCP37 will continue until the sewerage system is fully functional.***

- *Economic (Financial) Implications*

*There are no economic implications as all costs are borne by the contractors*

- *Policy or Statutory Implications*

*There are no policy or statutory implications from the following recommendations*

- *Director's Review*

*Improvements to the system have occurred and will continue to improve the sewerage system to a satisfactory level.*

**RECOMMENDATION:**

**That the information be noted.**

.....  
**K J Finnie**  
**DIRECTOR SHIRE SERVICES**