

**Legatus Group CWMS Advisory Committee**

Friday 19th July 2019

10.00 – 11.30 am

Clare and Gilbert Valleys Council Chambers

4 Gleeson Street

Clare

**AGENDA**

1. **Welcome, introductions and apologies**
2. **Previous Minutes**

The minutes from the meeting held on 15 March 2019 were presented to the Legatus Group 31 May 2019 meeting where they were noted, and it was approved that the Legatus Group Councils promote the SA CWMS Conference 23 August 2019 within their councils.

The draft minutes from the meeting held on 23 May 2019 are attached.



1. **Membership**

The terms of reference allow for a Board Member of the Legatus Group to be a member of the CWMS Advisory Committee there is currently a vacancy – For discussion.

1. **Discussion with regulators: cutting red tape and levelling the playing field**

Following the resolutions from the last meeting, a one-page briefing paper was sent to officers of the four regulatory agencies and an invitation was sent to the agency CEOs inviting their representatives to this Committee meeting and the up- coming Conference.

The Committee will host officers from all four regulators:

1. SA Health Kamran Mangi Environmental Engineer
2. ESCOSA Nathan Petrus Director, Consumer Protection & Pricing

Ashley Harbutt Regulatory Analyst.

1. OTR Yannick Monrolin Water & Sewerage Infrastructure
2. EPA Dr Shaun Thomas Team Leader, Wastewater

Pearl Tassel Senior Environmental Advisor,

Compliance Branch

The Committee briefings on these issues have made clear that the invitation is to begin a conversation. It is intended that the discussions will identify issues and processes for the agencies’ participation in the Conference.

1. **Draft report and interim findings Sludge Processing Project**

The *Executive Summary* and *Conclusions and Recommendations* sections of this report are included below. It is anticipated that the full report will be tabled at the meeting when the author presents her work.

Legatus Group Regional Community Wastewater Management Scheme (CWMS) Survey and Sludge Processing Plant Viability Investigation

**Author: Harsha Sapdhare**

Executive summary

This report makes life cycle cost estimates for improving sludge treatment by comparing de-watering bag (DWB), mechanical de-watering unit (MDU) and septage dewatering ponds (SDP). The comparison shows that the use of SDP is the least cost option, closely followed by DWB.  It would provide adequate protection against biological hazards and be fully compliant with current regulations.  However, before this option is adopted, more work is needed.

Firstly, the preferred option requires that sludge be transported to aggregation sites. That will not only impose new costs, but it will also change current operating procedures and require capital expenditure.  To determine that it would be a financial improvement means comparing it to current costs, but no Legatus Group Councils adequately accounts for its current sludge management (almost universally the very simple option of spreading sludge on nearby agricultural land).

Secondly, the current method involves hidden costs and benefits.  Licenced sludge disposal sites are inadequately monitored at present and there could be issues around environmental pollution, the costs of which are uncounted.  Some sites are likely sources of improved soil productivity but again there is no accounting of those benefits.  These uncounted costs and benefits will change with a move to SDPs.

This report recommends that Councils improve their understanding of current sludge management.  In particular, sludge sites need improved monitoring: septage and sludge is being directly applied to the land, without further monitoring or follow-up. In addition, sludge management costs need to be determined.

Sludge management is difficult and expensive. The fundamental problem is that Legatus Group council areas produce relatively little sludge from many small and isolated schemes.  It is heavy, bulky and dangerous, so that transporting and aggregating it is expensive.  It might be that a decentralised approach, such as at present, is the best option.

# Conclusions and recommendations

The conclusions of this report are tentative. The scope of this project, the lack of pre-existing information and the major role played by private contractors, mean that more resources are required to make firm recommendations regarding the viability of a regional sludge management. The recommendations that follow are shaped by these limitations.

The first conclusion is that the most cost-effective sludge treatment process that could replace current practices for Legatus councils, including the private sector management of septage, is Sludge Dewatering Ponds. This conclusion is tentative firstly because full operational costs have not been estimated. In particular, the cost of this treatment depends critically on the cost of transporting sludge to the facility and selection of the environmentally optimal site, neither of which have been considered here in sufficient detail.

***Recommendation 1:***

***A site selection process for a sludge treatment facility be undertaken. The selection is to optimise both transport costs and environmental impacts.***

The second conclusion is that establishing sludge treatment facilities will not be viable in the sense of being profitable and self-supporting. The price received for treated sludge will only offset some of the costs of the operation. Of course, it is possible that this will represent a net gain by reducing the current costs, but the next conclusion is pertinent.

The third conclusion is that councils themselves cannot report their sludge operations in any detail. The sludge quantities are unknown, costs breakdowns are unrecorded, and monitoring is not undertaken, at least not systematically with records kept. In addition, virtually all the septage in these systems is managed by private contractors and councils know almost nothing about these operations.

It follows that it is impossible to determine if the SDP proposal would be an improvement, in financial terms. This situation leads to the following recommendation, aimed at generating the information needed.

***Recommendation 2:***

***An indicative costing be undertaken for a selected council’s current sludge management process. This should form a template and a base case for other councils to then follow with their own costing exercises.***

The fourth conclusion is that current arrangements involve uncounted costs and benefits. In particular, Councils are contracting to have sludge spread on agricultural land but are not monitoring the subsequent processes and outcomes. It is not known if current arrangements are imposing unacceptable costs that would justify a shift to the SDP option.

***Recommendation 3:***

***That test monitoring be undertaken, and processes identified at selected, current sludge spreading sites to determine the environmental impacts of current arrangements.***

1. **2019 Conference Program**

The Program is being finalised and the updated draft will be tabled at the meeting.

1. **TAFE Course**

The Certificate 3 course in wastewater management is now complete. TAFE has sought feedback from the 15 students, and some have replied. There is no mechanism for TAFE to supply that feedback to outside bodies. The Legatus Group CEO has approached the regional manager for TAFE for feedback.

It is recommended that Legatus Project Officer survey course participants from Legatus Councils regarding the course and the results will be provided to a future Committee meeting.

1. **Research opportunities with UniSA**

Legatus is discussing Memoranda of Understanding with a number of universities. These include one with the Natural and Built Environments Research Centre at the UniSA, which would adopt wastewater as its initial focus. The MoU will also anticipate broadening that focus to include asset management and waste more generally.

1. **Any other business**
2. **Close and date of next meeting.**