**Waste 2017 Abstract Submission**

**Optimising Landfill and Haulage Solutions through Active Tenderer Engagement**

*My presentation is relevant to the following topic area(s).*

🞎 Circular economy 🞎 Overseas experiences

🞎 Collection (inc MUD’s, transient population areas) 🞎 Problem/Hazardous waste (inc asbestos, clinical &

🞎 Container Deposit Schemes medical, ocean plastics, paint, tyres etc)

🞎 Economics (inc business cases, data gathering, 🞎 Product Stewardship

monitoring performance) 🞎 Regional issues

🞎 Education (inc community engagement) 🞎 Recycling (inc CRC’s, collection)

🞎 E-Waste 🞎 Regulations and levies

🞎 Grants (outcomes and processes) 🞎 Social enterprise

🞎 Infrastructure (inc major waste grants, EfW, organics) 🞎 State based issues (eg. Fit for the Future NSW)

🞎 Innovative projects (case studies preferred) 🞎 Technology

🗹 Landfill (inc operations, regulations) 🗹 Tenders and contracts

🞎 Litter and/or illegal dumping (inc litter initiatives) 🞎 Other 🞎 Organics (inc collection, processing)

**Presenter information**

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**Co-authors information** (not presenting)

**Co-authors names:** Jason Grandcourt and Shannon Gorman

**Co-authors positions:** Manager Waste Services, and Waste Services Coordinator

**Co-authors organisation:** Mackay Regional Council

**Biography**

John Davis is an executive manager/consultant with 35 years’ experience in the infrastructure delivery and contract services sector, having particular experience in infrastructure delivery, field services and facilities operation & maintenance contracts in water and waste management businesses.

For the last 20 years he has specialised in advising on capital infrastructure and service delivery transactions, and in contract risk management and commercial negotiations for those contracts. He has extensive experience in services contracts, and in the capital projects space experience in a wide variety of contracting models including incentive based D&C, collaborative contracts, ETIs, ECIs, Alliances, DBO, and DBFO/BOOT projects.

**Abstract Summary**

Since 2014, Mackay Regional Council (Council) has been renewing its suite of waste management service contracts which were all approaching their contract expiry.

The most significant of these was the tender for the bulk waste haulage and landfill operation; which was awarded in December 2016. The services required include operating a bulk haulage fleet, loading at the Paget Transfer Station, transferring that waste to the Hogan’s Pocket landfill and the operation of the landfill.

The tender approach provided opportunities to tenderers to optimise both the haulage component, against disclosed Council capital investment criteria; and the landfill leachate management solution. The approach taken allowed Council to proceed with a $2 million leachate system capital upgrade, coincident with the tender award; confident that this was the best value lifecycle cost solution.

**Abstract**

Since 2014, Mackay Regional Council (Council) has been renewing its suite of waste management service contracts which were approaching their contract expiry.

The suite of contracts to be tendered during this period principally comprised:

* + Waste and recyclables, including green waste, collection services;
  + Material Recovery Facility (MRF);
  + Resource Recovery Facility (RRF);
  + Minor Transfer Stations – Operations;
  + Minor Transfer Stations – Roll on Roll off (RORO);
  + Construction & Demolition Waste Recycling;
  + Green Waste Management;
  + Paget Transfer Station Services; and
  + Waste Haulage and Landfill Services

Work was undertaken to review all of the operational contracts to assess the risks, make improvements to the specifications to achieve improved performance and value for money; and to increase the commercial market interest. As an example, the RORO contract was changed from a 1 year contract on various sites to allow an option for all sites for 4 years in order to offer the opportunity for a contractor to optimise fleet and equipment across the combination of sites.

The most significant of these tenders was the tender for the bulk waste haulage and landfill operation; which was awarded in December 2016. The services required include operating a bulk haulage fleet, loading at the Paget Transfer Station, transferring that waste to the Hogan’s Pocket landfill and the operation of the landfill.

The substantive services for this contract are at two Sites, Hogan’s Pocket Landfill and at the Paget Waste Management Centre (WMC) with the haulage component being between those two locations. At the Landfill, the contractor is responsible for most of the operations on site excluding the landfill gas management system. At the Paget WMC, the overall operations comprise consolidation and management of waste at the transfer station pit and load out operations for the bulk haul fleet.

Council sought to obtain best value offers from the market by allowing Tenderers to apply their expertise in developing options that potentially optimise the arrangements for two key aspects of the Services, being:

(i) optimisation of the configuration of the haulage fleet; and

(ii) optimisation of the leachate management system at the landfill.

Bulk haulage of waste between Paget Transfer Station and Hogan’s Pocket Landfill represented more than half of the variable contract costs for the landfill and haulage operation. Accordingly, increasing the freight capacity for this bulk waste transport task can potentially influence productivity and efficiency. The tender provided options that allowed tenderers to understand the potential trade-off for Council.

The other option explored an optimised approach to leachate management. Council’s Waste Services recognised there are a variety of options available to respond to the generation of leachate in excess of on-site disposal capacity; and it was recognised that the industry sector could bring significant expertise to managing the inter-relationship between landfill operations, leachate generation rates and leachate management / disposal.

In each case, it was recognised that the optimum solution may involve capital investment by Council; and accordingly Council implemented a tender response and tender evaluation process that it expected would allow the overall best value solutions to be identified and delivered.

The paper and presentation explain the process followed and the outcomes. The approach taken allowed Council to proceed with a $2 million leachate system capital upgrade, coincident with the tender award; confident that this was the best value lifecycle cost solution as evidenced by the tender responses.