

5.8. FNQ029 REGIONAL REMOVAL AND BENEFICIAL REUSE OF BIOSOLIDS

REPORT AUTHOR Peter White, Coordinator Water and Wastewater

MANAGER Jonathan Ward, Manager Water and Wastewater

DEPARTMENT Water and Wastewater

RECOMMENDATION

That Council:

1. **Enters into Contract FNQ029 – Regional Removal and Beneficial Reuse of Biosolids with Arkwood (Gloucester) Pty Ltd based on a Schedule of Rates, for a period of 2 years commencing 1 October 2022, with an extension option of up to 12 months, available at Council’s discretion; and**
2. **Delegates authority to the Chief Executive Officer in accordance with the s 257 of the *Local Government Act 2009* to enter into contracts, negotiate, finalise, and execute all matters associated with or in relation to this contract, subject to Council’s normal procurement policies and practices.**

EXECUTIVE SUMMARY

The Far North Queensland Regional Organisation of Councils (FNQROC) invited suitably qualified contractors to tender for the removal and beneficial reuse of biosolids on behalf of participating FNQROC member Councils. The interested parties in the tender process are as follows:

- Cairns Regional Council
- Cassowary Coast Regional Council
- Cook Shire Council
- Douglas Shire Council
- Mareeba Shire Council
- Tablelands Regional Council
- Yarrabah Aboriginal Shire Council
- Arkwood (Gloucester) Pty Ltd

The intent of the Contract is to provide a safe and effective biosolids removal and beneficial reuse service to the region, which provides consistency, efficiencies and savings to all participating FNQROC Councils and economies of scale opportunities to the Contractor. Any biosolids that cannot be beneficially reused will be suitably disposed of by the Contractor.

A Request for Tender was released on 11 April 2022 and closed on 6 June 2022. Only one tender submission was received which was evaluated by an evaluation committee made up of representatives from each participating Council.

Table 1. Received Submissions Summary

Tenderer	Price	Status
Arkwood (Gloucester) Pty Ltd	\$ 97.20 / tonne	Conforming

As such, Arkwood (Gloucester) Pty Ltd is recommended for contract award. Arkwood (Gloucester) Pty Ltd has been providing an effective regional service since 2016 and is currently considered the only Contractor capable of providing the full range of services required that ensures biosolids are safely removed. Arkwood (Gloucester) Pty Ltd will undertake all required testing of biosolids to determine suitable land application.

Whilst there are several Councils involved in the collective offer to the market, each Council are required to have an individual Contract with the selected Contractor as FNQROC does not have formal delegated authority to enter into Contracts on behalf of Councils.

Following Contract award, participating Councils will explore more broadly the regional opportunities for future biosolids disposal, through FNQROC, including waste to energy options.

BACKGROUND

Biosolids are treated sewage sludge and are the major by-product of the wastewater treatment process. When treated and managed appropriately, biosolids can be beneficially used for multiple purposes. Council's wastewater treatment plants produce biosolids that are being beneficially reused and require these biosolids to be regularly removed and disposed of. The intent of the Contract arrangement is to provide a safe and effective biosolids and sludge removal and beneficial reuse service across the region.

In 2015, the Far North Queensland Regional Water Alliance (previously FNQWRAP) identified the removal and beneficial reuse of biosolids as a potential procurement improvement opportunity for member Councils, as there was only one supplier actively working in the region. The aggregation of regional volumes and collective scheduling was identified as potentially opportunity for both Councils and suppliers to benefit from economies of scale and improved efficiency. It was also hoped that a collective arrangement would encourage additional suppliers into the region and increase the number of farms licensed for beneficial reuse. The formation of one collective tender process with individual contracts managed centrally by FNQROC would lessen the administrative burden on Councils and facilitate coordinated best-practice across the region.

COMMENTS

Following a Request for Tender (RFT) in 2016, submissions were previously received from three suppliers. Arkwood (Gloucester) Pty Ltd, who had previously been providing the service to several councils in the region, were by far the most competitive at the time of the previous tender and was awarded the contracts for the Regional Collection and Beneficial Reuse of Biosolids for a 3-year period, commencing on 1 July 2016, with the option to extend by a further 2 x 12 months.

The last and final contract extension was extended by 3 months to ensure continuity of service and is due to expire on 30 September 2022. A new Contract needs to be established to ensure continuation of service such that Council is able to meet operational requirements and is not left without a supplier to remove biosolids from its wastewater treatment plants.

The current contract with Arkwood (Gloucester) Pty Ltd includes a rate of \$76.57 / tonne. Before the contract was extended in June 2022, Arkwood (Gloucester) Pty Ltd confirmed it would be seeking a substantial price increase across all Councils, providing several reasons for the proposed price increases including increased transport and wage costs.

A public tender was released on 11 April 2022 and closed on 6 June 2022. A pre-tender briefing was also held during the tender advertising period on 26 April 2022 to enable prospective tenderers to find out more information, however representatives from Arkwood (Gloucester) Pty Ltd were the only attendees.

Prior to the release of the RFT to market, FNQROC was advised that the only other identified service provider had ceased trading and gone into voluntary administration. The RFT was released as planned to identify if there were any other contractors that may be able to offer an alternative option, but Arkwood (Gloucester) Pty Ltd was the only submitter at the closure of the RFT process.

Table 2. Received Submissions Summary

Tenderer	Price	Status
Arkwood (Gloucester) Pty Ltd	\$ 97.20 / tonne	Conforming

Only one tender submission was received by 6 June 2022 which was evaluated by an evaluation committee made up of representatives from each participating Council.

The weighting attributed to each criterion was:

Table 3. Evaluation Criteria

Criteria	Weighting
Business Profile (Local, Social and Sustainability)	10%
Relevant Experience & Capability	20%
Resources	20%
Work Procedures and Methodology	20%
Price	30%

Tenderer's rankings from the evaluation matrix are shown in Table 4.

Table 4. Scoring

Tenderer	Business Profile	Experience	Resource	Methodology	Price	Total Score	Rank
Arkwood	Strong	Very Strong	Very Strong	Strong	Strong	Strong (85%)	1

(Ratings out of 10: 2 - Unsatisfactory, 4 – Marginal, 6 – Fair, 8 – Strong, 10 – Very Strong)

Arkwood (Gloucester) Pty Ltd has provided effective services to date and greatly assisted in the navigation of the End of Waste (EoW) Code, introduced in 2020 but resulting in minimal disruption to Council services. The Department of Environment and Science (DES), under the Waste Reduction and Recycling Act 2011, is responsible for developing the EoW codes.

The EoW Code specifies outcomes that need to be achieved for a waste to be deemed a 'resource', i.e. biosolids, and states its requirements for registered resource producers, as well as conditions for the use of that resource. Arkwood (Gloucester) Pty Ltd currently undertakes all required testing of biosolids to determine suitability for land application, including the recent introduction of additional testing for Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) and Total Organic Fluorine (TOF) as required by the EoW Code for biosolids.

Expenditure is expected to increase considerably following the unit price increase from \$76.57 to \$97.20 per tonne. Rates will also increase annually in line with CPI for subsequent years. Considering all of these price increases, the annual spend is expected to be in the region of \$194,400.00 excl. GST based on an estimated tonnage of 2,000, plus a monthly fuel levy.

Table 5. Historical Biosolids Disposal Costs

Year	Weight (t)	Total (\$)
FY17-18	1,890	133,271.26
FY18-19	1,887	133,255.70
FY19-20	1,987	144,631.08
FY20-21	2,037	153,608.39
FY21-22	1,753	134,179.12
FY22-23 (Estimated)	2,000	194,400.00 *

* Excludes fuel levy detailed below and annual CPI indexation

The fuel levy will remain in place until the price of diesel drops below the proposed terminal gate price (TGP). A fuel levy of 5.74 cents per tonne (excl. GST) for every cent per litre increase in diesel will apply - i.e. 1 c per litre increase in TGP Diesel (Brisbane) = Fuel Levy increase of 5.74c per tonne.

The lack of suitable local contractors, the proposed price increases and EoW Code requirements have provided growing impetus to reconsider the way that Councils deal with biosolids.

Whilst preliminary enquiries have been made into emerging technologies and the alternative uses of biosolids, they are not currently considered suited to either traditional organics processing due to the current EoW Code or Energy from Waste markets due to their moisture content. This means that other opportunities need to be investigated with regard to what needs to be done to enable emerging uses of biosolids needs to be understood.

In the short term, it is recommended that Arkwood (Gloucester) Pty Ltd is awarded the contract for the Regional Removal and Beneficial Reuse of Biosolids, which will provide immediate contract certainty for several years.

Thereafter, a more detailed review needs to be commenced through FNQROC to explore more broadly the regional opportunities available for biosolids disposal, including Waste to Energy.

PROPOSAL

1. Enters into Contract FNQ029 – Regional Removal and Beneficial Reuse of Biosolids with Arkwood (Gloucester) Pty Ltd based on a Schedule of Rates, for a period of 2 years commencing 1 October 2022, with an extension option of up to 12 months, available at Council's discretion; and
2. Delegates authority to the Chief Executive Officer in accordance with the s 257 of the *Local Government Act 2009* to enter into contracts, negotiate, finalise, and execute all matters associated with or in relation to this contract, subject to Council's normal procurement policies and practices.

FINANCIAL / RESOURCE IMPLICATIONS

Council has allocated \$240,000 in the OPEX budget 2022/23, and so there will be sufficient funds to undertake the work associated with this contract.

RISK MANAGEMENT IMPLICATIONS

Risk Management:

Arkwood (Gloucester) Pty Ltd is an established company with sound capability and a proven work history. Arkwood (Gloucester) Pty Ltd has previously provided the service to Councils in the region for several years.

There is a risk that changes to the EoW Code may impact the suitability of biosolids for beneficial reuse. Arkwood (Gloucester) Pty Ltd has arrangements in place to dispose biosolids deemed unsuitable for beneficial reuse and has proposed pricing.

The contract term will enable councils to seek alternative arrangements at the end of two years if the arrangements are no longer deemed suitable.

SUSTAINABILITY IMPLICATIONS

- Economic:** Arkwood (Gloucester) Pty Ltd has a depot and infrastructure in the region and employs personnel based across the region. The biosolids are beneficially reused at several farms across the region including in Cairns, Mareeba, Warrami and Innot Hot Springs.
- Environmental:** Application of the biosolids to the receiving farms does not take place until the material has been tested and met the requirements of the EoW Code.
- Social:** The Contract enables for the safe and effective management of biosolids and sludge removal whilst ensuring the material is beneficially reused benefiting local farms.

CORPORATE/OPERATIONAL PLAN, POLICY REFERENCE

This report has been prepared in accordance with the following:

Corporate Plan 2019-2024 Initiatives:

Theme 3 – Leading Environmental Stewardship

Our visitors and residents deeply value the unparalleled environment in which we live. We recognise our responsibility in protecting and preserving our natural world for generations to come. We understand the strong link between the environment and the economy: they are interdependent. Douglas Shire will be at the forefront of environmental protection by developing strategies, setting policies, and working with all stakeholders to become the envy of and to inspire locations across Australia and the World.

Goal 2 – We will implement programs that reduce and offset our environmental footprint.

Goal 3 – We will continue to build water infrastructure so that the Douglas Shire may enjoy water security and water quality.

Theme 5 – Robust Governance and Efficient Service Delivery

Strong governance and financial management are the foundations of the way in which Council will conduct its business and implement the initiatives of the Corporate Plan.

Goal 3 – We will make sound financial decisions by ensuring robust strategic planning, financial management and reporting.

Operational Plan 2022-2023 Actions:

Far North Queensland Regional Resource Recovery Plan - Continue participation in regional collaboration for the development of a Far North Queensland Regional Resource Recovery Plan to identify opportunities to manage waste efficiently as a region.

COUNCIL'S ROLE

Council can play a number of different roles in certain circumstances and it is important to be clear about which role is appropriate for a specific purpose or circumstance. The implementation of actions will be a collective effort and Council's involvement will vary from information only through to full responsibility for delivery.

The following areas outline where Council has a clear responsibility to act:

Custodian	Council owns and manages infrastructure, facilities, reserves, resources and natural areas. In fulfilling its role as custodian, Council will be mindful of the community, the economy, the environment and good governance.
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CONSULTATION

Internal: Wastewater Operations and Finance Department

External: Water & Waste Technical Officers – Participating FNQROC Councils

COMMUNITY ENGAGEMENT

The contract enables for the safe and effective management of biosolids and sludge removal whilst ensuring the material is beneficially reused benefiting local farms.

ATTACHMENTS

Nil