

CABINET

Date of Meeting	Tuesday 14 March 2017
Report Subject	Landfill Management and Gas Engine Maintenance Contract
Cabinet Member	Cabinet Member for Waste and Public Protection
Report Author	Chief Officer (Streetscene & Transportation)
Type of Report	Operational

EXECUTIVE SUMMARY

The Council owns two active landfill sites at Standard Industrial Estate and Brookhill Industrial Estate in Buckley. Both landfill sites are operationally closed with formal closure plans currently being produced with the support of Natural Resources Wales (NRW).

Both sites have established electricity generating systems with direct feeds from the gas well collection ring mains within the landfill, connecting directly to the national grid via a local grid connection.

The waste leachate fluid produced by the two landfill sites is treated on site in a specialist treatment facility, before being discharged to sewer.

Maintenance of the gas engines and leachate plant are currently undertaken by a combination of individual outsourced contracts, with some in-house support. This report seeks Cabinet approval for the Commissioning Form which will allow the service to procure a single supplier for both the general landfill maintenance and gas engine/leachate plant management.

RECOMMENDATION

1	That Cabinet approves the Commissioning Form (Appendix 1) for Landfill Maintenance, Gas Engine and Leachate Plant management - as required by the CPR's.
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REPORT DETAILS

1.00	EXPLAINING THE BACKGROUND TO THE NEW POLICY
1.01	<p>The Council has two active landfill sites at Standard Industrial Estate and Brookhill in Buckley. Both landfill sites are operationally closed, fully capped and the sites are now restored, primarily to grassland. A formal 'Closure Plan' is currently being actioned with NRW support for both sites. Both sites have recently installed PV panels, which are also linked to the mains grid connection.</p>
1.02	<p>Both sites have established electricity generating systems with direct feeds from the gas well collection ring mains and both sites have a direct electrical mains grid connection. The value of energy produced at the sites is falling as gas levels inevitably fall as the waste decomposes.</p>
1.03	<p>Within the boundary of the Brookhill landfill site is a fully permitted and compliant leachate treatment plant with a licensed discharge point to main sewer. The plant treats leachate from both Standard and Brookhill and in addition generates an income for the Council by treating leachate from other local landfill sites under a contract with Cory Environmental.</p>
1.04	<p>Both the generating engines are maintained under separate contracts with private organisations however there is clear independency between the two processes with effective leachate management having a significant influence on electricity production levels. Therefore it is intended to procure a single contract incorporating all of the existing individual contracts, including the general landfill management, which also closely links to the energy production and leachate output.</p>
1.05	<p>In order to maximise the income from the energy plants and minimise the cost of leachate management, investment is required, both in new more efficient and smaller turbines (as gas levels fall) and on the gas wells and ring mains that serve the engines. The most effective method of obtaining this investment would be through engagement with an external operating partner. The partner would ideally be experienced and in possession of a number of other landfill sites maintenance contracts allowing suitable engines to be rotated around the sites as gas levels vary - rather than purchase new units on each occasion when a new engine would provide financial benefit.</p>
1.06	<p>Scope of the proposed Contract</p> <ul style="list-style-type: none">• Daily site management at both of the landfill sites to ensure compliance with Permit and planning consents - including local compliance testing, litter collections, general tidiness etc;• Gas well management to ensure permit compliance and in order to maximise output from the system;• Strategic development of gas wells including investment as necessary;• Generator engine management and maintenance;• Strategic development of engine generators including investment as necessary;

	<ul style="list-style-type: none"> • Management of the leachate collection wells and underground infrastructure to ensure compliance with permit; • Transfer of leachate from Standard to the Brookhill treatment facility as necessary; • Management and maintenance of the leachate collection and treatment facility to ensure compliance with permit and Welsh Water discharge license;
1.07	The value of the proposed contract requires completion and Cabinet approval of a Commissioning form included as Appendix 1 .

2.00	RESOURCE IMPLICATIONS
2.01	The new contract will protect budgets and remediate future pressures from the operations at the two sites. This will however be subject to the level of risk each contractor/partner would want to take on the anticipated energy still remaining from gas at the former landfill sites. The outcome will not be known until the tender evaluation has been completed.
2.02	The proposals will ensure that the Council manages the asset in the most environmentally friendly manner and will maximise and protect the Council from fluctuations in energy production levels in future years.

3.00	CONSULTATIONS REQUIRED / CARRIED OUT
3.01	Consultation has taking place with potential suppliers to ensure the most appropriate contract option.
3.02	With Cabinet Member.
3.03	With the Procurement team regarding process.
3.04	With Legal support team regarding contract.

4.00	RISK MANAGEMENT
4.01	Delivery of the project will be managed through the service Programme Board with individual risk identified and review on a regular basis.
4.02	To ensure the successful partner is experienced and capable of operating and managing the sites in a compliant and effective manner, a stringent quality evaluation will be undertaken on each tenderer, before an invitation to tender is offered.

5.00	APPENDICES
5.01	Appendix 1 - Commissioning Form

6.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS
6.01	None. Contact Officer: Stephen O Jones Telephone: 01352 704700 E-mail: stephen.o.jones@flintshire.gov.uk

7.00	GLOSSARY OF TERMS
7.01	NRW – Natural Resources Wales