27 October 2014

AnaeCo Limited ABN 36 087 244 228
3 Turner Avenue, Technology Park
Bentley, Western Australia 6102
PO Box 1287, Bentley DC WA 6983
Ph: +61 8 9361 4777
Fx: +61 8 9361 4888
info@anaeco.com
www.anaeco.com

Australian Stock Exchange
Company Announcements Office
Exchange Centre
Level 1
20 Bridge Street
Sydney NSW 2000

WMRC Project Update – Ramp up

Highlights

- **MRF operating up to 57% of nominal design capacity.**
- **Biogas production increasing and exceeding expectations.**
- **First compost delivered to contracted off-taker for assessment.**
- **Energy generation capability indicates net positive energy will be achieved.**
- **Capture of methane contributes to greenhouse gas abatement.**

Following is an update of activities at the WMRC Project where commissioning is progressing rapidly and regular operations are ramping up. This update covers significant events since the previous update on 29 August 2014.

Biological Ramp-up*[1]

Ramp-up batch #4 has been completed with compost removed from a bioconversion vessel and delivered to the contracted off-taker for assessment. Batch #4 comprised 296 tonnes of MSW, or 28% of weekly nominal design capacity.

Batch #5 comprised 460 tonnes of MSW (43% of weekly nominal design capacity) and the organic fraction has been loaded into a bioconversion vessel.

Biological Ramp-up is proceeding well, evidenced by an increased rate of biogas production.

Methane comprises approximately 50% by volume and 30% by mass of the biogas generated during the anaerobic phase of bioconversion. Measured over the 11 day anaerobic digestion phase, batches #3 and #4 each produced more than 5 tonnes of methane, compared to 1.6 tonnes and 3.2 tonnes for batches #1 and #2 respectively.

We have recorded a trend of increasing maximum methane production per tonne of organic matter undergoing bioconversion, measured across batches #1 to #4. This indicates the bacterial inoculum in the process water is developing rapidly and is exceeding our expectations for these early ramp-up batches.

MRF Operations

MRF processing has continued largely unaffected by the impact of the offline process water storage tank on bioconversion processing (explained further below).

The effect of a process water storage tank being offline is that we cannot commence loading a new batch for bioconversion until the previous batch is completed. In this by-pass mode we run the MRF as a distinct operation. This has allowed us to make continual progress with operating practices for separating and diverting the various fractions of the incoming MSW.

In this period we have lifted MRF processing performance and throughput quite significantly. To date the highest daily amount of MSW accepted into the plant has been 121 tonnes, which is 57% of nominal daily design capacity. The highest weekly amount of MSW accepted to date is 460 tonnes, which is 43% of nominal weekly capacity.

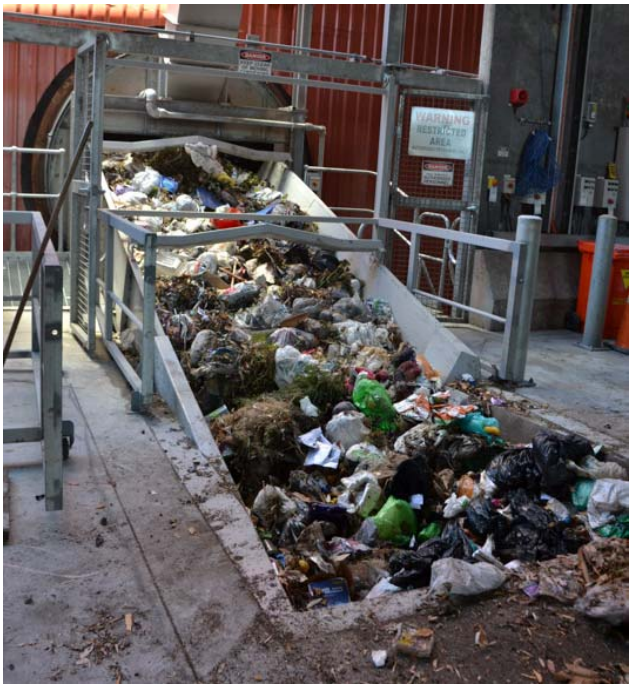

Figure 1: MSW on feed conveyor into the trommel for primary sorting.

Power Generation

The biogas produced by the bioconversion process is currently being flared as we are waiting for Western Power to complete grid connection works. Accordingly the plant is not yet generating electricity from the biogas. The project principal recently signed contracts with Western Power and grid connection work has commenced, however we are advised it will take approximately 3 months until connection is available and the plant can commence generating electricity.

One of the design objectives of the plant is to be a net producer of energy. With the plant operating at below 50% throughput capacity, and the MRF and BCF operations not continuously synchronised as a consequence of a process water storage tank being offline, early indications are that it will achieve net positive energy production. This assessment is based on the calculated electrical energy that could have been generated from batch #3 and #4 methane (were the grid connection completed). Calculations show the electricity which could have been generated from this methane is approximately 75% of the electrical energy used by the plant in the same period.

The ratio of energy generated (or capable of being generated) to energy consumed should rise as we progress through ramp-up for the following reasons.

Methane production will increase further as the bacterial inoculum matures and greater tonnages of OFMSW are processed.

With MRF operations continuing at a faster pace than bioconversion (MRF running in by-pass mode) there is proportionately more power being used by the mechanical sorting equipment. The MRF is currently operating in the range of 40% to 60% of nominal capacity on any given day, whereas bioconversion processing is only at 15% to 20% of capacity, and as discrete batches in series. Once all three DiCOM™ vessels are in service there will always be two vessels in anaerobic phase at a given time, thereby generating more biogas.

Greenhouse Gas Abatement

Methane captured in the bioconversion process makes a positive contribution to greenhouse gas abatement. The quantity of methane captured and flared during each of batches #3 and #4 has a greenhouse gas equivalent effect of removing 17 cars from the road for a year. Extrapolating these numbers we estimate the AnaeCo™ AWT Plant at the WMRC Shenton Park facility, once operating at full capacity, will capture sufficient methane annually that will be equivalent to the removal of at least 3,500 average passenger vehicles from the road for a year. (Calculation based on US EPA GHG Equivalency Calculator)

Process water storage tank rectification

As previously reported, during batch #1 a minor biogas leak was detected around the roof of one of the two anaerobic process water storage tanks. This tank has been rectified and returned to service. The second process water storage tank is to be inspected on the same basis as the first tank and if necessary will be rectified. If rectification of process water storage tank 2 is required, it will be out of service for approximately 6 weeks.

Having one of the anaerobic process water tanks offline for inspection and rectification has not halted biological or operational ramp-up but does hinder progress. To date we have lost 13 weeks progress relative to the original ramp-up plan. We estimate that by the time rectification is complete and both process water storage tanks are operating together the total delay relative to the planned ramp-up schedule will be 15 weeks (previously reported as 10 weeks). The delay is caused by the fact that we are forced to run batches in series (end to end) rather than a parallel sequence.

Commenting on the progress of Ramp-up AnaeCo Managing Director David Lymburn said,

> “We are very pleased with the overall rate of progress in commissioning and operations at the WMRC Project. MRF processing is regularly reaching new highs. For example, MSW throughput for October was double that of September and more than seven times August. The first delivery of organic fertiliser to the project off-taker for assessment is another key milestone as the plant moves towards an operational footing. The next goal is to lift the level of bioconversion processing activity in line with MRF operations.”

Following is a selection of pictures from the removal of organic fertiliser at the end of Ramp-up Batch #4, October 2014.

Figure 2: Sample of organic fertiliser removed from Ramp up Batch #4.

Figure 3: Organic fertiliser unloaded from DiCOM™ bioconversion vessel at the end of Ramp-up Batch #4.

Figure 4: Organic fertiliser loaded into truck for delivery to off-taker for assessment. Batch #4.

Notes

*1 Biological Ramp-up is the phase in commissioning operations whereby the stock of anaerobic process water containing the bacterial inoculum that performs anaerobic digestion is expanded from an initial batch of $10m^3$ to a full facility stock level of $1,500m^3$. This cultivated expansion occurs in a natural process whereby the bacteria multiply as a result of consuming organic matter. The anaerobic bacterial inoculum are fed with a mixture of organic matter harvested from MSW processed at the AnaeCo™ AWT Plant, and organic rich water taken from the WDS. The expansion of the inoculum occurs at a rate determined by their inherent rate of multiplication and the rate of feeding.

*2 Bioconversion Cycle – a period of nominally 21 days comprised of:

- 5 days loading a DiCOM™ vessel with organic material harvested from MSW, with pressurised aeration occurring during this period,
- transition from aerobic conditions to anaerobic by the removal of oxygen and the introduction of process water containing bacteria active in the thermophilic range,
- 11 days anaerobic digestion, producing biogas,
- transition from anaerobic conditions to aerobic by the removal of process water and biogas, reintroduction of oxygen,
- 4 days aerobic conditioning under pressurised aeration.
- 1 day unloading of compost/soil conditioner.

Abbreviations

AWT: Advanced Waste Technology
BCF: Bioconversion Facility
MRF: Material Recovery Facility
MSW: Municipal Solid Waste
WDS: Wet Density Separation System
WMRC : Western Metropolitan Regional Council

ENDS

For further information, please contact:

David Lymburn – Managing Director (08) 9361 4777

About AnaeCo

AnaeCo delivers Alternative Waste Technology (AWT) facilities based on the AnaeCo™ System, incorporating the patented DiCOM™ bioconversion process. The AnaeCo™ System includes advanced sorting, recycling, anaerobic digestion and aerobic composting to recycle municipal solid waste (MSW) into renewable energy from biogas, organic fertiliser and recyclables such as steel, aluminium, glass and plastics, thus maximising diversion from landfill and ensuring social, economic and environmentally sustainable management of MSW.

The AnaeCo™ System enables resource recovery intervention closer to source, with enhancement of existing waste transfer stations now a viable waste management option. AnaeCo's experienced team provides design, and commissioning services for AnaeCo™ AWT facilities.

For further information go to www.anaeco.com

About the WMRC Project

The WMRC Project involves the construction and commissioning of an AnaeCo™ AWT Plant at the JFR McGeough Resource Recovery Facility in Shenton Park, Western Australia.

The JFR McGeough RRF is a solid waste transfer station owned and operated by the Western Metropolitan Regional Council.

The AnaeCo™ AWT Plant is an asset owned by Funds managed by Palisade Investment Partners Ltd and is contracted to receive 55,000tpa of MSW.

The WMRC Project is the first full operational scale installation of the AnaeCo™ System and is a transfer station retro-fit occupying less than 4,000m^2.

Figure 5: AnaeCo™ AWT Plant at WMRC JFR McGeough Resource Recovery Facility, Shenton Park, Western Australia