



# MUNICIPAL UTILITIES FRIDAY PACKET

January 10, 2020

## Fats, Oils and Grease (FOG) Program Updates

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In 2019, the Fats, Oils and Grease (FOG) and Tempe Grease Cooperative (TGC) programs merged, streamlining our approach to protecting the City’s infrastructure from FOG waste. The Tempe FOG program has made strides in concentrating its efforts to control FOG discharges into the City’s wastewater collection system through a combination of updated practices, business assistance initiatives and community sustainability efforts. As the program matures, several short- and long-term efforts are being implemented to continue our safeguarding efforts.

### Grease Trap Assistance Program (GTAP)

On July 1, 2018, the TGC received \$60,000 from Tempe’s Innovation Fund to pilot a zero-interest loan program to assist TGC members with replacing corroded, non-functional grease traps that have the potential to allow FOG to pass through into the publicly-owned wastewater collection system.

To encourage more food service establishments (FSE) to utilize the loan program and address FOG pass through and non-compliance, staff has implemented a new program scope.

	Original Scope	Updated Scope
Who can apply for a GTAP loan?	<ul style="list-style-type: none"> <li>Members of the Tempe Grease Cooperative only</li> </ul>	<ul style="list-style-type: none"> <li>All Food Service Establishments in Tempe</li> </ul>
How can the loan be used?	<ul style="list-style-type: none"> <li>Grease traps</li> <li>Replacing existing infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Grease Traps</li> <li>Grease interceptors</li> <li>Replacing existing Infrastructure</li> <li>Installing new infrastructure</li> </ul>

These modifications are intended to assist a broader customer base and help bring more non-compliant FSEs into compliance in a timely manner, while lessening the financial impact to local businesses.

### Food to Energy Co-Digestion Feasibility

Throughout 2019, the City partnered with the City of Mesa, Arcadis and Arizona State University’s Biodesign Swette Center for Environmental Biotechnology to determine the technical, operational and financial feasibility of a food waste and FOG co-digestion program at Mesa’s Northwest Water Reclamation Plant (NWWRP). Co-digestion of these organic wastes in an anaerobic digester is a more sustainable solution than landfills, with multi-tiered benefits including increased biogas production for energy use, reduced organic material hauling distances, reduction of landfill space consumed and reduction in fugitive methane emissions.



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While not advocated in the short-term, the long-term recommendation is to construct a pre-processing facility and use an engineered organic slurry to co-digest food and FOG waste at the NWWRP. The wide range of other benefits include the diversion of organics from landfills, the potential to reduce Mesa's greenhouse gas footprint by almost 5,000 metric tons of carbon dioxide equivalents per year and the estimated production of about 1,700 gallons of diesel equivalents per day, which is enough to fuel 15-20 refuse trucks per day.

Through continued partnership with the City of Mesa, Tempe can contribute to these efforts. Specifically, the collection and disposal of FOG waste amassed through the TGC is a significant proportion of the organic waste needed for co-digestion and may enhance biogas production. Tempe's FOG waste currently is de-watered and landfilled. This sustainable alternative would increase Tempe's landfill diversion rate.

The full report is available upon request.

#### **Tempe City Code Updates – Short and Long Term**

The Water Utilities Division (WUD), Environmental Services Section (ESS), currently is reviewing and updating Chapter 27 of the Tempe City Code (TCC), *Sewers and Sewage Disposal*, for accuracy, clarity, continuity and functionality related to current and future requirements, practices, technologies and terminologies. This is an ongoing effort that will take several months to draft before suggested updates are presented to Mayor and City Council.

However, ESS has identified one area of the TCC that requires prompt attention. Chapter 27 currently contains firm, boilerplate requirements that are not always practical or necessary for some businesses. Alternatives, called Best Management Practices (BMPs), can be implemented, minimizing the risk of FOG entering the wastewater collection system.

Accordingly, with business compliance assistance in mind, ESS will be submitting for Mayor and City Council's consideration a new subsection under Section 27-22, which will allow the Municipal Utilities Director or his designee to grant variances to requirements in this section of the TCC and formalize BMP agreements when such a variance or BMP would not result in harm to the wastewater collection system. ESS anticipates this information being presented for consideration in the first quarter of 2020.

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