Minutes of the

REGULAR MEETING OF THE ENVIRONMENT COMMITTEE

Tuesday, May 8, 2018

Committee Members Present:

Sandra Rummel-Chair, Marie McCarthy, Harry Melander, Wendy Wulff-Vice Chair

Committee Members Absent:

Cara Letofsky, Edward Reynoso, Lona Schreiber

CALL TO ORDER

A quorum being present, Committee Chair Rummel called the regular meeting of the Council's Environment Committee to order at 4:15 p.m. on Tuesday, May 8, 2018.

APPROVAL OF AGENDA AND MINUTES

It was moved by Wendy Wulff, seconded by Marie McCarthy to approve the agenda. Motion carried.

It was moved by Harry Melander, seconded by Marie McCarthy to approve the minutes of the April 24, 2018 regular meeting of the Environment Committee. Motion carried.

BUSINESS

2018-118 Seneca Polymer Contract

It was moved by Wendy Wulff, seconded by Marie McCarthy, that the Metropolitan Council authorize its Regional Administrator to award and execute a contract to Polydyne, Inc. of Riceboro, GA to provide Clarifloc polymers at a unit price of $0.85 per pound delivered to the Seneca Wastewater Treatment Plant for the period June 1, 2018 through May 31, 2023. This contract will be for a period of two years with an option to extend for three additional one-year periods with the total procurement not to exceed $3,750,000. **Motion carried.**

INFORMATION

1. Balancing Treatment Quality and Energy Savings During Wastewater Treatment During the Winter Months:

   Larry Rogacki, Assistant General Manager, Support Services introduced members of the University of Minnesota, Dr. Tim LaPara and Paige Novak, from the Department of Civil, Environmental, and Geo-Engineering.

   Dr. LaPara began by providing the following background of a 2-year study: One goal of wastewater is to prevent degradation of water quality when treated wastewater is released. The majority of wastewater treatment is achieved by bubbling air through the wastewater, thereby growing microorganisms or bacteria that “eat the waste. Bubbling air through wastewater requires a lot of energy and is a major cost of treatment.

   Protein breaks down during wastewater treatment, releasing ammonia. Ammonia poses a somewhat difficult challenge because it requires a lot of air and energy and the organisms that degrade ammonia are susceptible to upsets. Ammonia levels in treated wastewater are regulated only in the summer, not in the winter.

   Environmental impacts of ammonia are reduced in the winter as well as regulations on ammonia emissions. MCES reduces aeration in the winter to reduce operating costs and reduce greenhouse gas emissions.

METROPOLITAN COUNCIL

A problem was identified as to when “normal” aeration practices should be re-started after the winter months. Historically, this has been difficult to answer because there has not been a good method to measure the organisms to eat ammonia.

A possible solution was identified through research conducted via a DNA-based method which is now available and can be used to quantify the bacteria that eat ammonia. Method is sufficiently quick to use as a monitoring tool with a 1-day turnaround. A book by RJ Parker, PhD and Peter Vronsky, PhD called “*Forensic Analysis and DNA in Criminal Investigation*” was referenced.

Project goals were to measure bacteria that eat ammonia at the Metropolitan, Blue Lake, and Seneca Wastewater Treatment Facilities over the course of one year. Through the site evaluations, it was hoped to determine if there was a method that could be used to make informed decisions regarding the control of aeration as well as validate the method with a different, high-throughput DNA sequencing method that can also measure bacteria that eat ammonia. Data results were shared.

Conclusions determined that the quantities of bacteria that eat ammonia do not change during the winter, even though these organisms are not as active. Practically speaking, this suggests that reducing aeration is a viable approach to save energy during the winter months without compromising environmental protection.

The method is effective at quantifying microorganisms that were previously difficult to measure. The method can be used to measure other organisms of interest, such as those that help remove phosphorus and nuisance organizations.

Comments and Questions:
A committee member inquired if aeration continues throughout the year, would the ammonia microbes continue working? Dr. LaPara stated that they work in the warmer weather and stop working when it colder, but they stay around. If aeration is left on continuously throughout the year, the microbes would still be removing ammonia. Reducing the level of aeration equates to an energy savings.

A committee member asked if there is an idea how much energy would be saved by turning down the aeration. Staff member George Sprouse stated he does not have an exact number but was a substantial savings. Post meeting, Mr. Sprouse shared the aeration energy savings achieved at the Metro Plant account for approximately $1.6 million per year.

2. Budget Concepts, Rates and Customer Forums:

Ned Smith, Director of ES Finance and Revenue shared information regarding 2019 budget concepts, rates, and details of upcoming customer forums.

- Sources & Rates:
  - Wastewater Charge: 3.5%
  - Sewer Availability Charge (SAC): No increase
  - Industrial Strength Charge: 3.4%
  - Industrial Permit Fee: 3.5%
- Uses
  - 6.1% increase over 2018
    - 4.7% without pass through grants

- Projected 2019 revenue sources of $300 million
    - Municipal Wastewater Charge: 77%
    - Sewer Availability Charge: 15%
    - Industrial Waste Charge: 4%
    - Other (includes State appropriations, other post-employment benefits (OPEB) adjustment and $3 million use of reserves: 4%
- Projected 2019 uses by category
    - Debt Service: 46%
    - Salaries and Benefits: 22%
    - Consulting and Contractual: 7%
    - Materials Supplies and Chemicals: 6%
    - Interdivisional Services: 6%
    - Rent and Utilities: 5%
    - Pay-as-you-go: 4%
    - Other (includes pass through grants, centralized projects, and other miscellaneous expenses): 4%
- A breakdown of the operating budget was provided
- Preliminary labor budget for 2019 estimates 658 regular FTE's (687 FTE's including overtime) with a vacancy factor of 30 FTE's which includes general salary increases, plus step increases. Risk factors that could affect these estimates are attrition rates, workforce planning, and health care costs (self-insured)
- Preliminary budget for debt service reflects an $8 million increase (or 6.1%) for 2019 and a $2 million increase (or 22%) for Pay-As-You-Go (PAYGO). Risk factors are capital spending increases such as regulatory changes**,** as well as interest rate increases on new debt such as public facilities authority (PFA) loans and G.O. bonds.
- PAYGO will be $11 million in 2019.
- Projected wastewater outstanding debt is forecasted to remain flat in 2019 at $1.3 billion
- Peer agency debt per capita shows MCES remains one of the lowest across the United States with the Twin Cities debt per capita at $392.
- Peer agency retail sewer rate per household shows MCES remains one of the least costly across the United States with the Twin Cities sewer rate per household at $242.
- Municipal wastewater charge increases compared to the NACWA average shows the MCES rate is now aligned. Between 2020-2022 MCES' goal will be to continue to be below a 4% increase with a long-term goal of less than or equal to the inflation rate.
- Sewer Availability Charge rates have remained unchanged since 2015 with SAC units recovering since 2009.
- The SAC reserve fund has been steadily recovering since 2010 while remaining above the Council policy minimum balance.
- Industrial rates were reviewed with the annual permit fee ranging from $1,025 to $10,000 (a 3.5% increase) and a general permit fee if $100-$500 (no increase)
- 2019 Rate Setting Schedule is as follows:
    - Industrial Workshops held at Metro 94 on March 22 for Liquid Waste Haulers, April 19 and 24 for all other permit holders.
    - Summary to Environment Committee today (May 8)
    - Municipal Customer Forums scheduled for May 24 from 9:00 to 11:00 a.m. at the Minnetonka Community Center Banquet Room and June 7 from 1:30 to 3:30 p.m. at the Eagan Community Center Oak Room – Committee members are encouraged to attend
    - Environment Committee will hear a review of the customer input and vote on the 2019 rate adoption recommendation on July 10
    - The Council will vote on the proposed rate adoption on July 25

- Preliminary operating budget adoption will occur on August 22

Comments and Questions:

A Committee member commented she was here in 2009 and remembers contemplating how we could recover SAC Units and here we are back to the 20,000-range. She further stated some of the decrease in SAC reserve in the early 2000's was intentional. In hindsight they shouldn't have been doing that, because they would need the cushion for later.

Is it common practice to bucket so much in to "Other Expenses"? Staff stated as projects come up, the costs will be moved to the actual budgets of the projects. Proposed projects are currently known, and other projects depend on the weather and other operating factors.

Staff clarified that the comparative information for San Juan Puerto Rico as they may not have been charging enough to maintain their infrastructure prior to the hurricane.

Committee members thanked staff for the fantastic work that has been done with our budgets.

3. General Manager Report:

No report at this time. Received an email regarding 6 plant Platinum status. More to come.

Committee Member Wulff asked how many plants were above Hastings in compliance? Staff stated there are currently 3 plants nationwide with more continuous years of compliance.

ADJOURNMENT

Business completed, the meeting adjourned at 4:52 p.m.

Susan Taylor
Recording Secretary