Minutes of the

REGULAR MEETING OF THE ENVIRONMENT COMMITTEE

Tuesday, June 23, 2015

Committee Members Present:

Sandra Rummel-Chair, Marie McCarthy, Wendy Wulff-Vice Chair, Lona Schreiber, Edward Reynoso

Committee Members Absent:

Harry Melander

CALL TO ORDER

A quorum being present, Committee Chair Rummel called the regular meeting of the Council's Environment Committee to order at 4:03 p.m. Tuesday, July 14, 2015.

APPROVAL OF AGENDA AND MINUTES

It was moved by Edward Reynoso, seconded by Lona Schreiber to approve the agenda. Motion carried.

It was moved by Edward Reynoso, seconded by Wendy Wulff to approve the minutes of the Tuesday, June 23, 2015 regular meeting of the Environment Committee. **Motion carried.**

BUSINESS

1. 2015-163: Adoption of MCES 2016 Wastewater Rates and Charges

It was moved by Edward Reynoso, seconded by Wendy Wulff that the Metropolitan Council adopts the following wastewater rates and charges to be effective January 1, 2016:

- Metropolitan Wastewater Charge (total of municipal wastewater charges) of \$201,013,000;
- Sewer Availability Charge (SAC): \$2,485 per Residence or Residential Equivalent Capacity;
- Temporary Capacity Charge : \$1.25 per thousand gallons;
- Industrial Strength Charge: \$.204 per excess pound of TSS (total suspended solids);
- Industrial Strength Charge: \$.102 per excess pound of COD (chemical oxygen demand);
- Standard Load Charge: \$58.80 per thousand gallons;
- Holding Tank Load Charge: \$9.34 per thousand gallons;
- Portable Toilet Waste Load Charge: \$75.86 per thousand gallons;
- Collar County Load Charge: \$73.80 per thousand gallons;
- Strength component of Industrial Load Charge \$.4090 per excess pound of TSS;
- Strength component of Industrial Load Charge \$.2045 per excess pound of COD;
- Out-of-Region Load Charge Component for hauled waste: \$15.00 per thousand gallons; Industrial Permit Fees as shown on Attachment A; and I&I Surcharge Exceedance Rate: \$421,000 per million gallons /day (rate of maximum measured flow within an hour over allowed flow rate).

Motion carried.

2. 2015-164: Authorization to Award and Execute Community Solar Garden Lease, Subscription and Power Purchase Agreement with Oak Leaf Energy Partners

It was moved by Wendy Wulff, seconded by Lona Schreiber that the Metropolitan Council authorize the Regional Administrator to sign land leases (4 sites), community solar subscription agreements (3 sites), and power purchase agreement (1 site) with Oak Leaf Energy Partners. **Motion carried**.

3. 2015-165: Authorization to Negotiate and Execute an Intergovernmental Agreement with the City of Mound

It was moved by Lona Schreiber, seconded by Wendy Wulff that the Metropolitan Council authorize its Regional Administrator to negotiate and execute an intergovernmental



agreement with the City of Mound for the construction of portions of city facilities within the Metropolitan Council Interceptor 6-MO-651 Improvement project. **Motion carried.**

4. 2015-172: Ratification of Emergency Declaration for Repair and Replacement of Mendota Forcemain

It was moved by Edward Reynoso, seconded by Marie McCarthy that the Metropolitan Council ratifies the attached *Justification for and Declaration of Emergency* for repair and replacement of Mendota forcemain. **Motion carried.**

INFORMATION

1. MCES Interceptor Pipe Condition Assessment Program -

MCES serves 108 communities and contains 610 miles of pipes, 8 wastewater treatment plants and 60 lift stations around the 7 county Metropolitan area. There are 481 miles of gravity pipe comprised of 73% is concrete and metal. There is 116 miles of forcemain pipe comprised of 78% concrete and metal.

An ongoing program gravity condition assessment is in place to evaluate pipe conditions rated as category 1 through 5 (with 5 being most degraded) via closed circuit television inspection.

Forcemain condition assessment that is difficult since it's a closed system. Internal closed circuit television inspection is costly due to diversion of flows and the need for excavation for pipe access. Internal assessment for leaks and gas pockets utilizes an uncertain technology. External inspection or pipe wall assessment can only be done in specific locations. Risk assessment is used to identify areas of potential corrosion and the impact of a failure near bodies of water or public facilities. Staff showed several images of differing degradation of pipes throughout the system evaluated via closed circuit television video.

Gravity sewer renewal projects are being planned to rehabilitate or replace 10 miles of condition 5 pipe (the most degraded) as soon as possible. This will be part of the 2015-2017 capital program. Projects are being planned to rehabilitate or replace 90 miles of condition 4 pipe as soon as possible and will be part of the 2018-2025 capital program. We are working with other agencies to partner with projects being planned for areas where our pipes require rehabilitation.

Status update for the forcemain renewal program is as follows:

- Completed 18 miles in South St Paul, Plymouth, Long Lake, Mahtomedi, and Brooklyn Park
- Construction Phase 16 miles in Excelsior, Wayzata, Hopkins, and Waconia
- Design Phase 8 miles in Mound, Orono, St Bonifacius, Christmas Lake, and Galpin Lake
- Planning Phase 26 miles in Brooklyn Park, Moundsview, New Hope, Mound, Crystal, Chaska, Anoka, Orono, Lake Virginia, and Maple Plain

Technologies used for rehabilitation for pipes include cured-in-place pipe (CIPP), sliplining, and removal and replacement. Manhole structure rehabilitation currently uses cured in place lining, fiberglass lining inserts, polymer concrete inserts and coating systems.

Through the assessment process lessons learned indicated corrosion damage occurs in concrete and metal pipe which is 73% of the system with pipe age not a factor. Corrosion damage occurs in areas of high hydrogen sulfide which include:

- Turbulent areas: forcemain discharges, in pipe with steep slopes, meter stations, and at drop locations
- Low flow and low velocity
- Forcemain: high points and downhill sections

Considerations for a current approach for new interceptors are to use corrosion resistant materials, use chemicals and oxygen injection to reduce the sulfides in the wastewater, minimize forcemain length, and minimize turbulence by minimizing use of drops and highly sloped pipe.

Future condition information presentations will focus on deep tunnel inspections, river crossings, lift stations, and meter stations.

Comments and Questions of the Discussion:

Areas that are vulnerable to the hydrogen sulfide gases, how do we stay ahead of the degradation? We are establishing a follow up program to determine. We are fixing condition 5 pipes and with the follow up inspection we are hoping to determine how fast the condition 4 changes to a condition 5 and how much time we have.

What are some of the corrosion resistant materials? Cured in Place Pipes (CIPP), polyethylene, high-density polyethylene (HDPE), polyvinyl chloride (PVC).

2. General Manager's Report -

Bryce Pickart attended the meeting in GM Leisa Thompson's absence. He stated treatment plants continue excellent compliance and met all requirements in June.

ADJOURNMENT

Business completed, the meeting adjourned at 5:14 p.m.

Susan Taylor Recording Secretary