

Minutes of the

REGULAR MEETING OF THE ENVIRONMENT COMMITTEE

Tuesday, November 10, 2015

Committee Members Present:

Sandra Rummel-Chair, Lona Schreiber, Edward Reynoso

Committee Members Absent:

Wendy Wulff-Vice Chair, Harry Melander, Marie McCarthy

CALL TO ORDER

A quorum being present, Committee Vice-Chair Wulff called the regular meeting of the Council's Environment Committee to order at 4:04 p.m. Tuesday, November 10, 2015.

APPROVAL OF AMENDED AGENDA AND MINUTES

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

It was moved by Edward Reynoso, seconded by Lona Schreiber to approve the minutes of the Tuesday, October 27, 2015 regular meeting of the Environment Committee. **Motion carried.**

CONSENT BUSINESS

It was moved by Lona Schreiber, seconded by Edward Reynoso to approve consent business items 2015-284 through 2015-287. **Motion carried.**

1. 2015-284: Authorization to Approve Contract Amendment with Allied Barton Security Services

That the Metropolitan Council authorizes the Regional Administrator to amend contract 12P004 with Allied Barton Security Services for an additional \$150,000 from \$986,245 to \$1,136,245.

2. 2015-285: Authorization to Negotiate and Execute an Intergovernmental Agreement with the City of Mound

That the Metropolitan Council authorize its Regional Administrator to negotiate and execute an intergovernmental agreement with the City of Mound for the construction of City watermain and storm sewer improvements within a Metropolitan Council project to improve the 6-MO-651 system.

3. 2015-286: Authorization to Negotiate and Execute a Reconveyance Agreement with the City of Mound

That the Metropolitan Council authorize its Regional Administrator to negotiate and execute a reconveyance agreement with the City of Mound, and makes the following determinations pursuant to Minnesota State Statute 473.5111 related to reconveyance of the following facilities in the City of Mound:

Portions of Interceptor 6-MO-651 are no longer needed to implement the Council's Comprehensive Plan for collection, treatment and disposal of sewage in the metropolitan area. These facilities are of benefit for use by the City of Mound and are to be evaluated for condition and returned to good operating condition prior to transfer, if deemed necessary.

4. 2015-287: Authorization to Award and Execute a Contract for Construction of the Richfield Interceptor System – 66th Street Project

That the Metropolitan Council authorizes its Regional Administrator to award and execute a contract to construct Richfield Interceptor System – 66th Street Project 808700, Contract 15P226, to Veit & Company, Inc. for their low, responsive bid of \$9,500,079.

NON-CONSENT BUSINESS

5. 2015-288: Authorization to Hold a Public Hearing on the Draft Facility Plan for Metropolitan Wastewater Treatment Plant Asset Renewal

It was moved by Edward Reynoso, seconded by Lona Schreiber that the Metropolitan Council authorize the General Manager of Environmental Services to hold a public hearing on the Draft Facility Plan for the Metropolitan Wastewater Treatment Plant Asset Renewal, MCES Project No. 808900. **Motion carried.**

6. 2015-289: Authorization to Approve the City of Afton Historic Village Sewage Treatment Area Comprehensive Sewer Plan Amendment, Review File No. 20736-3

It was moved by Edward Reynoso, seconded by Lona Schreiber that the Metropolitan Council adopt the attached Review Record and approve the City of Afton's amended comprehensive sewer plan which outlines the provision of locally provided wastewater services for the *Historic Village area*. **Motion carried.**

INFORMATION

1. Wastewater Energy Capture Partnership in the Twin Cities –

Jason Willett introduced Ken Smith, President and CEO of Ever-Green Energy. Ever-Green Energy, an affiliate of District Energy of St. Paul consults and develops, owns, and operates energy systems. More on them can be found at <http://www.ever-greenenergy.com/>

Smith provided information regarding the potential for thermal energy capture from wastewater in our pipes and/or City mains.

Smith said:

- “To improve the efficiency of our national and international energy and expand the use of renewable energy, we need to consider where our energy is used. According to the United Nations and the US Department of Economics, cities currently account for over 70% of global energy use, and 50% of global greenhouse gas emissions.
- In the United States, buildings are the largest users of energy, 41% of all primary energy and 7% of global primary energy consumption in the United States is used to serve the needs of the building sector.
- The energy is mostly used for heating and cooling and the heating of water for showers, washing, etc.
- Taking full advantage of renewable energy and increased energy efficiency opportunities in cities and towns requires a different approach to planning and development. Traditional planning and design silos must be redefined. We must move from vertical planning, to integrated or holistic planning and design.
- Community energy systems deliver thermal energy derived from a variety of sources to buildings located in a “district.” This allows for: sustainably meeting the energy needs of existing buildings and upcoming development, provides first-installed cost savings for developers, provides life-cycle cost savings for building owners, provides potential for reducing energy costs for tenants, and reduced greenhouse gas emissions.

- Wastewater thermal energy recovery is one way to do this. During the winter heating season, heat is extracted from the wastewater main used to heat buildings. During summer cooling season, heat from the buildings is rejected into the wastewater main to cool buildings.
- Ever-Green Energy is currently pursuing wastewater energy capture in the twin cities first in the University Avenue/Prospect Park area, as well as looking at other areas.

The presentation included an example of wastewater thermal energy recovery around the world.

Staff clarified that:

- The sewage isn't used directly for heat. The heat is exchanged into a different fluid and the sewage is quickly put back into the interceptor, or City sewer main.
- There was a Council Community Development grant that helped development concepts be explored, including looking at alternative energy.
- There is no decision to proceed with this yet. The purpose of this presentation is to determine if there is interest and any comments, questions, or concerns.

Comments/Questions:

Q: In the places visited, who paid for the retro-fitting?

A: Payment depends on the area be serviced, and different forms of organization are used.

Q: Will there be an assessment to the property owner?

A: A model being explored is to recover the cost of the infrastructure in the charges to the building owners that use the heat. For each building, a contract would be entered in to with the developer/operator.

Q: How does an existing business that wants to, get involved?

A: One way to get involved would be to participate in the partnership. It is comprised of the community and the city. An entity, probably non-profit would become the "energy company" that provides the service to the customers but has yet to be defined and determined.

In summary, Smith stated in the modeling done in the University Avenue/Prospect Park area it would save the building owner money, both first costs and ongoing operational costs, as well as potentially saving money for tenants. Moreover, it would reduce carbon emissions 20% initially and to the extent we can reduce natural gas back up utilizing thermal storage and other energy sources, just by integrating thermal storage we are able to reduce carbon emissions by approximately 40%. And that collaboration is what it will take to do these types of projects.

Staff stated it appears to advance Thrive outcomes of environmental sustainability and prosperity, Council participation may be integral to making this concept work for the region, and given the interest expressed today we will continue to explore ways to collaborate to move this forward.

2. General Manager's Report –

Our compliance record continues on its award-winning paths. The Metropolitan Wastewater Treatment Plant has a 4 year compliance record. Our other six plants 8 years, 9 months or greater. Committee Member Schreiber commented this is an excellent report.

Committee Member Schreiber also suggested the water rate study should be presented as an information item to the full Council.

ADJOURNMENT

Business completed, the meeting adjourned at 5:04 p.m.

Susan Taylor
Recording Secretary