

Environment Committee

For the Metropolitan Council meeting of December 12, 2018

Subject: Reclaimed Water Agreements with Enerkem

Proposed Action

That the Metropolitan Council authorize staff to execute a Memorandum of Understanding and a Design Deposit Agreement with Enerkem related to reclaimed water service.

Summary of Committee Discussion/Questions

Staff clarified the regional investment evaluation is being made and will be brought to the Environment Committee for its consideration in the first quarter of 2019.

It is anticipated that a regional cost share, if approved by Council, would be applied to reduce a portion of the Southeast Metro Water Reclamation Facility construction costs that Enerkem would pay. There is currently no agreement with Enerkem for a regional investment in the Southeast Metro Water Reclamation Facility project because such a cost share requires Council approval. Staff anticipates beginning the process to consider a potential regional investment with the Environment Committee in the first quarter of 2019.

Reference was made to the Memorandum of Understanding in which Enerkem and the Council have stated their understandings of what costs Enerkem is to pay for the Southeast Metro Water Reclamation Facility design, construction, and operation.

Environment Committee

Meeting date: December 11, 2018

For the Metropolitan Council meeting of December 12, 2018

<p>Subject: Reclaimed Water Agreements with Enerkem</p> <p>District(s), Member(s): All</p> <p>Policy/Legal Reference: 2040 Water Resources Policy Plan, Amended May 9, 2018</p> <p>Staff Prepared/Presented: Jeannine Clancy, 651-602-1210; Deborah Manning, 651-602-1114</p> <p>Division/Department: MCES c/o Leisa Thompson, 651-602-8101</p>
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Proposed Action

That the Metropolitan Council authorize staff to execute a Memorandum of Understanding and a Design Deposit Agreement with Enerkem related to reclaimed water service.

Background

Enerkem, Inc., a Canadian firm developing a solid waste-to-biofuel project in Inver Grove Heights, has expressed interest in obtaining reclaimed water service from MCES. Enerkem anticipates that its facility will need approximately 1.6 million gallons per day (mgd) of reclaimed water for process and cooling water. MCES and Enerkem have been discussing potential reclaimed water service for several years. MCES will need to construct and operate treatment and pipeline facilities in Dakota County in order to provide the reclaimed water service. On February 14, 2018 Council authorized staff to negotiate (1) a non-binding memorandum of understanding memorializing MCES’ and Enerkem’s understandings and expectations of the developing project and (2) a design deposit agreement assuring MCES of payment from Enerkem for MCES’ design costs. Council staff have negotiated a Memorandum of Understanding (Attachment A) and a Preliminary Design Deposit Agreement (Attachment B), covering preliminary design costs, in accordance with Council’s authorization. It is anticipated that, if the project moves to the detailed design phase, that a separate design deposit agreement would be negotiated and executed for that phase.

Rationale

The Council staff request authority to execute the Memorandum of Understanding and the Preliminary Design Deposit Agreement.

Thrive Lens Analysis

Thrive MSP 2040 sets the direction for the Council’s development of wastewater reuse where economically feasible to promote sustainable water resources and emphasizes working with the Council’s partners. Working with Enerkem on this potential wastewater reuse project aligns with Thrive MSP 2040’s goals by developing wastewater reuse capability in a collaborative manner, setting the stage for reuse-dependent job and economic growth, while advancing resource recovery from solid waste and generation of renewable energy.

Funding

The Preliminary Design Deposit Agreement would provide \$600,000 in funding from Enerkem for preliminary design of the Southeast Metro Water Reclamation Facility. If Council receives a \$300,000 reuse grant from MPCA, funding from Enerkem would be reduced to \$300,00 and provide the matching funds required by the grant.

Known Support / Opposition

The majority of comments from the Southeast Metro Water Reclamation Facility Plan's public hearing and comment period were positive about the Council's engagement with Enerkem on this project.

MEMORANDUM OF UNDERSTANDING

Reclaimed Water Service

THIS MEMORANDUM OF UNDERSTANDING is made and entered into between the Metropolitan Council and Enerkem, Inc. (Enerkem). This non-binding Memorandum of Understanding relates to the Council providing Enerkem reclaimed water service at a planned Enerkem facility in Inver Grove Heights, Minnesota.

WHEREAS, the Metropolitan Council is a public corporation and political subdivision of the State of Minnesota; and

WHEREAS, the Council's responsibilities include constructing, equipping, operating and maintaining wastewater interceptors and treatment works in the seven-county Metropolitan Area; and

WHEREAS, the Council's comprehensive plan, development guide, and water resources policy plan, direct the Council to pursue wastewater reuse where economically feasible as a means to promote sustainable water resources; and

WHEREAS, Enerkem intends to construct a waste-to-biofuels facility in Inver Grove Heights Minnesota; and

WHEREAS, Enerkem sent the Council a letter of interest indicating its interest in using reclaimed wastewater ("Reclaimed Water") for its facility; and

WHEREAS, since Enerkem's submittal of letter of interest, the Parties have been discussing reclaimed water service for this site; and

WHEREAS, Enerkem anticipates that its facility will need approximately 1.6 million gallons per day ("mgd") of process and cooling water; and

WHEREAS, in order to provide Enerkem reclaimed water service the Council would need to construct treatment and pipeline facilities ("Council Facilities"); and

WHEREAS, in order to receive reclaimed water service Enerkem will need to construct facilities to receive the Reclaimed Water ("Enerkem Facilities"); and

WHEREAS, the Council and Enerkem believe that the Council Facilities and the Enerkem Facilities together will promote sustainable use of water resources by reusing water that would otherwise be discharged to the Mississippi River, eliminating the need to pump approximately 1.6 mgd of groundwater; and

WHEREAS, the Council completed the Southeast Metro Water Reclamation Facility Plan (July 2018) ("Facility Plan"), attached as Exhibit A, for the Council Facilities, defining the proposed Council Facilities concept; and

WHEREAS, the Minnesota Pollution Control Agency (“MPCA”) gave preliminary approval to the Facility Plan, with full approval pending MPCA’s public review process; and

WHEREAS, the Parties understand that a Reclaimed Water Service Agreement must be entered into between the Parties prior to construction of the Council Facilities and the Parties desire to memorialize, in this Memorandum of Understanding, their understandings and expectations, including key terms of a Service Agreement; and

WHEREAS, the governing body of the Council authorized the negotiation of this Memorandum of Understanding at its meeting on February 14, 2018.

NOW, THEREFORE, below are the Parties’ non-binding, mutual understandings and expectations for the Council Facilities and Enerkem Facilities.

1. *Design and Construction of Council Facilities.*

- a. Enerkem’s reimbursement of the Council for Council Facilities design costs will be the subject of two Design Deposit Agreements, one for Preliminary Design and one for Detailed Design. The reimbursement by Enerkem will be on a fixed-fee basis to be identified in the Design Deposit Agreements. The Parties’ intent is that Enerkem will provide funds in advance of design tasks via deposits identified in a workplan, review, and payment schedule included in the Design Deposit Agreements. Subject to the foregoing, Enerkem will pay the Council for the incurred design costs regardless of whether the Council Facilities are constructed.
- b. The Facility Plan forms the basis of preliminary design requirements for the Council Facilities. The Council understands that Enerkem is reviewing a number of items covered in the Facility Plan, such as its reclaimed water demand. Enerkem understands that both Parties need to review these items and agree to any changes from the Facility Plan early in preliminary design.
- d.
- c. The Council will develop a preliminary design of the Council Facilities, in accordance with industry standards and using the Facility Plan as the basis for the preliminary design. The Council will evaluate issues such as redundancies, backups, and water storage capacity during preliminary design. At the beginning of preliminary design, the Parties will establish a technical coordination team with representatives from both Parties. This team will conduct preliminary design work task reviews and will also facilitate exchange of technical information critical to the preliminary design work, such as the characteristics (location, elevation, etc.) of the reclaimed water connection at the Enerkem Facilities. At the conclusion of preliminary design, both Parties will sign a letter agreeing to the resulting

preliminary design concepts. The results of preliminary design will be documented in a Preliminary Design Report, prepared by the Council.

- e.
- d. Before the Council advertises for bids for construction of the Council Facilities, the Council will provide Enerkem the invitation for bid documents for review and comment. Enerkem will provide any comments within 14 business days after receiving the bid documents. The Council will take into account Enerkem's comments in the final bid documents. After opening the bids, the Council will give Enerkem a written tabulation of the bids with the Council's recommendation for selection of the lowest responsible bidder. Within 14 days of the date the Council provides Enerkem with the bid tabulation, Enerkem will provide the Council with written notification of Enerkem's acceptance or rejection of the bid amount. If Enerkem rejects the bid amount, the Council has no obligation to award the construction contract or construct the Council Facilities.
- f.
- e. The Council will endeavor to have the Council Facilities operational on a date to be defined in the Service Agreement. The Council estimates that it will take 22 to 24 months to bid and award a construction contract, complete construction and commissioning, and be operational.
- f. The Council is responsible for obtaining all permits necessary for the Council Facilities.

2. *Design and Construction of Enerkem Facilities.*

- a. Enerkem is responsible for designing Enerkem Facilities which include all tanks, pipes, connections, treatment, meters, and appurtenances necessary for Enerkem to use the Reclaimed Water from the Delivery Point
- b. Enerkem will design Enerkem Facilities to comply with the Council's waste discharge rules and all applicable laws and regulations.
- c. The schedule for construction and commissioning of Council Facilities and Enerkem Facilities will be defined in the Service Agreement.
- d. Enerkem is responsible for obtaining all permits necessary for the Enerkem Facilities.
- e. In employing professional services and contractors for the Enerkem Facilities, the Council strongly encourages Enerkem to solicit and include businesses that participate in the Metropolitan Council's Underutilized Business Program ("MCUB"). A list of these firms is available on the Council's website. Within 90 days of completion of the Enerkem Facilities, Enerkem will provide the Council with documentation of its MCUB inclusion efforts.

3. *Service Agreement Key Terms.* In order for the Council to advertise for bids for construction of the Council Facilities, the Parties must first execute a Service Agreement detailing the parties' responsibilities for the Council Facilities and Enerkem Facilities as well as the reclaimed water service. The terms below are a non-exclusive list of key terms that the Parties intend to include in the Service Agreement.
- a. **Delivery and Distribution.** The Council Facilities will deliver the Reclaimed Water to Enerkem at the location identified in the Facility Plan.
 - b. **Quality**
 - i. The Council will provide Reclaimed Water treated as documented in the Facility Plan. The Council does not warrant that the treatment level is suitable for Enerkem's intended use.
 - ii. Enerkem is responsible for any additional treatment of the Reclaimed Water.
 - c. **Quantity.** The Council Facilities will be able to deliver and Enerkem represents that it intends to use approximately 1.6 mgd of Reclaimed Water in an average 7-day week and 2 mgd on a peak 7-day week after the Enerkem Facilities have ramped up to full capacity.
 - d. **Use of Reclaimed Water.** Enerkem will use the Reclaimed Water for process and cooling water at its waste-to-biofuel facility in Inver Grove Heights, Minnesota. Enerkem will represent and warrant that its use is only for non-potable reuse purposes described in the "Disinfected Tertiary" category shown in the MPCA's Wastewater Reuse Guidance (Exhibit B) and that its use will comply with all applicable laws and regulatory requirements.
 - e. **Service Availability Charge.** Council cannot waive its Service Availability Charge associated with the Enerkem Facilities.
 - f. **Industrial Waste Discharge Fees.** Council cannot waive its Industrial Waste Discharge Fees associated with the Enerkem Facilities.
 - g. **Council Service Interruptions**
 - i. The Council will design the Council Facilities to provide reliable Reclaimed Water service, including one distribution pipe, made of non-corrosive material. The Council may design the Council Facilities with redundancies, backups, and water storage capacity to the extent that they are considered necessary within industry standards to provide the service, as will have been agreed with Enerkem under the Design Deposit Agreement.

- ii. The Council and Enerkem recognize that reclaimed water service interruption is a significant issue. Service interruption will be discussed and negotiated further during preliminary design and as part of the Reclaimed Water Service Agreement.
 - iii. Enerkem understands that there may be planned and unplanned Council service interruptions. If the Council has an unplanned interruption in Reclaimed Water service, the Council will give Enerkem notice as soon as practicable after learning of the interruption. The Council will work with Enerkem to coordinate any planned Council service interruptions with Enerkem's planned plant shutdowns.
 - iv. Enerkem is fully responsible for ensuring that it has appropriate storage facilities, alternative water sources, and other contingencies to handle any Council service interruptions.
- h. Enerkem Facilities Interruptions
- i. Enerkem will design the Enerkem Facilities to accept Reclaimed Water service, generally consistent with the design of the Council Facilities that will have been agreed upon by the Parties.
 - ii. If Enerkem has a planned interruption in its ability to accept Reclaimed Water, it will give the Council at least 72 hours' notice.
 - iii. If the Enerkem has an unplanned interruption in its ability to accept Reclaimed Water, Enerkem will give the Council notice as soon as practicable, after learning of the interruption.
- i. Maintenance. Each Party is responsible for maintaining its respective facilities.
- j. Fees
- i. Enerkem will pay the Council a Fixed Fee and an Annual Operating Fee for Reclaimed Water as detailed below.
 - 1. Fixed Fee. A fixed fee to recover the Council capital costs of the Council Facilities including all MCES facilities required to produce and deliver reclaimed water (e.g., diversion of effluent from the Empire WWTP outfall, treatment, storage, and distribution piping). The Council capital costs include land acquisition, bid and award, construction, engineering during construction, commissioning, and testing. Before Council bids for the Council Facilities construction project, the Parties will enter into a Reclaimed Water Service Agreement that will

address the process for Enerkem's acceptance of Council's construction contract award, any change orders during construction, and for establishment of a fixed fee.

2. Annual Operating Fee. An Annual Operating Fee to cover the operating cost of the Council Facilities to produce and deliver Reclaimed Water on an open-book basis. The Council will adjust the Annual Operating Fee annually for inflation and any increased costs due to regulatory changes. The Council will confer with Enerkem about the cost impacts of regulatory changes before incurring any such costs.
3. Fee Adjustment. If there is excess capacity in the Council Facilities and the Council makes the Council Facilities available to an entity other than Enerkem, the Parties will renegotiate Enerkem's fees to lower them accordingly.
 - ii. The fees will not be based on Reclaimed Water metered flow.
 - iii. If the Parties agree to renew the contract at the expiration of the term, the Parties will endeavor to renegotiate new fees on an open-book basis. In negotiating new fees, the Parties will consider factors including: any outstanding Council capital costs; Council operational costs; future Council capital and maintenance costs; and whether there are other users of the Council's Reclaimed Water infrastructure.
 - iv. The Council will invoice Enerkem quarterly. Enerkem must pay all undisputed amounts within 45 days of the date of the Council's invoice.
- k. Financial Guarantee. Enerkem must furnish a bond payable to the Council in an amount equal to 100 percent of the Fixed Fee amount that remains to be paid over the term of the Service Agreement as security for the payment of Enerkem's obligation. The bond will be gradually released according to the payment schedule that will be included in the Service Agreement.
- l. Permits
 - i. Each Party is responsible for getting and maintaining all permits necessary for construction and operation of their respective systems.
 - ii. None of the agreements relating to reclaimed water relieve Enerkem of any obligations it will have in the industrial discharge permit it receives from the Council.
 - iii. Liability

1. Enerkem understands that there may be Council service interruptions. Service interruptions will be discussed and negotiated further during preliminary design and as part of the Reclaimed Water Service Agreement.
2. Each Party is responsible for its own acts.
3. *Limitation of Remedy.* Each Party waives all rights it may have to receive lost profit, consequential, exemplary or punitive damages for any claim it may have against the other Party under the Service Agreement. Neither Party may receive money damages in excess of its actual compensatory damages, notwithstanding any contrary provision in the Service Agreement or otherwise.

m. Insurance

- i. Once the design of the Council Facilities and Enerkem Facilities have progressed, the Parties will negotiate the insurance needs required of the contractors during the construction of the Enerkem Facilities and Council Facilities.

n. Term. The initial term of the Service Agreement is 20 years. The Parties will discuss renewal and extension options.

o. Default and Remedies for Default

p. Alternative Dispute Resolution. The Parties will engage in mediation with each party sharing the costs a mediator equally before any litigation unless the dispute involves an imminent health or safety threat.

q. General Provisions. The following general provisions will be included in the Service Agreement.

- i. Release of Government Data. Council will provide further information about those requirements at the 11/13/18 meeting. The release of data from any Council file relating to this Agreement, is governed by Minn. Stat. § 13.01, *et seq.* (“Minnesota Government Data Practices Act”); Minn. Stat. § 15.17 (“Official Records Act”), and any other applicable law. The Council will presume all data submitted by Enerkem are public unless: 1) Enerkem requests in writing that a particular item be treated as non-public in accordance with the Minnesota Government Data Practices Act or other applicable law; and 2) the Council determines that the request is permitted by law.

ii. Accounting; Records-Keeping; Audit

- iii. Non-Discrimination and Affirmative Action. The Parties will comply with Minnesota law regarding non-discrimination and affirmative action.
 - iv. Assignment. Neither Party may assign the Service Agreement without the written permission of the other party, such permission not to be unreasonably withheld. The Parties will further discuss this issue.
 - v. Emergency Powers. Nothing in the Service Agreement prevents the Council from taking actions within its power when an action by Enerkem causes or threatens to cause an endangerment to the health or welfare of persons, an endangerment to the environment, or interferes with the operation of the Metropolitan Disposal System.
 - vi. Force Majeure. The obligations of the Parties under the Service Agreement, other than payment, are subject to force majeure (which includes strikes, riots, floods, accidents, regulatory or legislative actions, Acts of God, and other causes or circumstances beyond the reasonable control of the Party claiming such force majeure as an excuse for non-performance), but only as long as, and to the extent that, such force majeure prevent performance of the obligations.
4. *Undertakings.* To achieve the Parties' intentions and expectations, the Parties will proceed with the following understandings and expectations:
- a. *The Council will:*
 - i. Negotiate a joint powers or similar agreement with the City of Inver Grove Heights. An agreement with the City is necessary for the Council to provide the Reclaimed Water Service; and
 - ii. Negotiate a Design Deposit Agreement with Enerkem;
 - iii. Apply for a reuse permit from the Minnesota Pollution Control Agency; and
 - iv. Negotiate a Service Agreement with Enerkem.
 - b. *Enerkem will:*
 - i. Negotiate a Design Deposit Agreement with Council; and
 - ii. Apply for permits from City, County, and State agencies;
 - iii. Negotiate a Service Agreement with the Council; and
 - iv. Develop a construction and commissioning schedule.

5. *Termination of Memorandum of Understanding.* Any Party may terminate, without incurring any liability whatsoever, this Memorandum of Understanding for any reason and at their convenience upon written notice to the other Party.
6. *Notices.* Any notice from a Party to the other Party will be deemed to have been given and received when mailed United States Mail to the other Party at the following addresses or at such other addresses as the Parties may designate in writing to each other:

Enerkem
Attn: David McConnell, VP
Commercial Development North America
1130 Sherbrooke Street
Suite 600
Montreal, Quebec
H3A 2M8
Facsimile: (514) 875-0835
Email: dmccconnell@enerkem.com
c.c. legal@enerkem.com

Metropolitan Council
Attn: Jeannine Clancy, Assistant General Manager, MCES
390 Robert Street North
St. Paul, MN 55101
jeannine.clancy@metc.state.mn.us

7. *Final Decision-Making Authority.* The Parties acknowledge and agree that any final decisions may require approvals by the Parties' respective governing bodies.
8. *Non-Binding.* The Parties agree this Memorandum of Understanding is a non-binding expression of the intent of the Parties which have no obligation pursuant to this Memorandum of Understanding or otherwise to conclude any agreement giving effect to the terms set out herein, and no agreement, understanding, or arrangement of any nature whatsoever in respect of same shall be deemed to exist unless and until the definitive agreements have been executed and delivered by each of the Parties thereto. Nothing in this Memorandum of Understanding creates any partnership, joint venture or agency relationship between or among the Parties.
9. *Definitions.*
 - a. "Delivery Point" means the point where the Council Facilities connect to Enerkem Facilities at the location shown in the Facility Plan.
 - b. "include" or "including" means including but not limited to.

IN WITNESS WHEREOF, the Parties have caused this Memorandum of Understanding to be executed by their authorized representatives. This Memorandum of Understanding is effective on the date when it has been signed by all of the Parties' authorized representatives.

METROPOLITAN COUNCIL

By _____

Its: Regional Administrator

Date _____

ENERKEM INC.

By _____

Its:

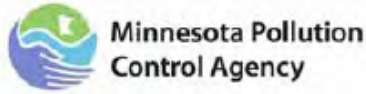
Date _____

EXHIBIT A

Southeast Metro Water Reclamation Facility Plan

The Plan can be found at: [https://metro council.org/Wastewater-Water/Services/Wastewater-Treatment-\(1\)/Wastewater-Reuse/Reuse-Publications/Southeast-Metro-Water-Reclamation-Facility-Draft.aspx](https://metro council.org/Wastewater-Water/Services/Wastewater-Treatment-(1)/Wastewater-Reuse/Reuse-Publications/Southeast-Metro-Water-Reclamation-Facility-Draft.aspx)

EXHIBIT B



Municipal Wastewater Reuse

Definition of Municipal Wastewater Reuse, Recycling, or Reclamation

Wastewater Reuse, Recycling, or Reclamation are interchangeable terms commonly used when treated wastewater effluent is used as a substitute for another source of water. Typically, the recycled wastewater is used in place of water from a lake, stream, groundwater, or drinking water supply for use in various agricultural, industrial, commercial or municipal activities.

Historical municipal wastewater reuse in Minnesota

The reuse of treated municipal wastewater in Minnesota is not new and has been practiced for more than 40 years. The most common reuse is for irrigation of agricultural crops, grassland, or forests and is commonly referred to as "spray irrigation". In 2009, there were approximately 32 Minnesota cities that reused treated effluent for irrigation of this type. More recently, there has been the emergence of recycling wastewater for golf course irrigation, industrial cooling, and for toilet flushing.

Concern is

The primary concern with the reuse of municipal wastewater is the protection of public health. Municipal wastewater contains pathogens and other microorganisms that could cause illness. Therefore, the regulation of reuse is based on the potential for human exposure with the wastewater. Reuse activities are categorized based on public access and the risk for the potential for human exposure with the effluent.

Treatment limits and types of reuse

Since 1992, the Minnesota Pollution Control Agency (MPCA) has used the State of California Regulations as guidance for the permitting of wastewater reuse. California was one of the first states to develop detailed regulations to ensure that the reuse of wastewater would be protective of human health. Like Minnesota, many other states have used California regulations as a template for their own requirements.

The required level and type of treatment is based on the type of reuse and establishes the total coliform bacteria that are allowed to be detected in the final treated water. Total coliform is used for the regulation of wastewater reuse rather than fecal coliform. A total coliform limit is more restrictive than a fecal coliform limit and is used as an additional safety measure.

Treatment design requirements

At a minimum, all reused municipal wastewater must be treated by a secondary treatment process or its' equivalent. The highest level of treatment, "disinfection tertiary" also requires filtration. The State of California Department of Public Health has published a report titled, "Treatment Technology Report for Recycled Water," and lists specific brand name technologies which have been demonstrated to meet the above treatment requirements. These technologies will be allowed with no additional testing required for verification. Other technologies may be allowed but additional justification will be necessary to document the performance capability with respect to the above requirements. A copy of the latest report can be found at the link provided at the end of this factsheet.

Storage requirements

Municipal facilities that irrigate all of their wastewater or a large volume of it must have sufficient storage to account for the fact that irrigation during the winter is not allowed in Minnesota. Facilities that propose to irrigate and do not have the ability to discharge elsewhere must have a minimum of 210-days of storage for flow during the period when vegetation is dormant and the ground is frozen. Facilities must also have a reuse contingency plan to ensure that insufficiently treated wastewater is not reused.

Treatment Limits

Types of reuse	Reuse permit limits	Minimum level of treatment
<ul style="list-style-type: none"> • Food crops where the recycled water contacts the edible portion of the crop, including root crops • Irrigation of residential landscape, parks, playgrounds, school yards, golf courses • Toilet flushing • Decorative fountains • Artificial snow making, structural fire fighting • Backfill consolidation around potable water pipe • Industrial process water that may come in contact with workers • Industrial or commercial cooling or air conditioning involving cooling towers, evaporative condensers, or spray that creates mist 	<p>2.2 MPN/100 ml. Total Coliform</p> <p>2 NTU daily average; 10 NTU daily maximum turbidity</p>	<p>Disinfected</p> <p>Tertiary secondary, filtration, disinfection</p>
<ul style="list-style-type: none"> • Cemeteries • Roadway landscaping • Ornamental nursery stock and sod farms with restricted access • Pasture for animals producing milk for human consumption • Nonstructural fire fighting • Backfill consolidation around nonpotable water pipe • Soil compaction, mixing concrete, dust control on roads and streets • Cleaning roads, sidewalks, and outdoor work areas • Industrial process water that will not come into contact with workers • Industrial boiler feed • Industrial or commercial cooling or air conditioning not involving cooling towers, evaporative condenser, or spray that creates mist 	<p>23 MPN/100 ml. Total Coliform</p>	<p>Disinfected Secondary 23</p> <p>Secondary, disinfection</p>
<ul style="list-style-type: none"> • Fodder, fiber, and seed crops • Food crops not for direct human consumption • Orchards and vineyards with no contact between edible portion • Non food bearing trees, such as Christmas trees, nursery stock and sod farms not irrigated less than 14 days before harvest • In Minnesota, this is commonly called "spray irrigation" 	<p>200 MPN/100 ml. Fecal Coliform</p>	<p>Disinfected secondary 200</p> <p>Secondary, disinfection</p> <p>(stabilization pond systems with 210 days of storage do not need a separate disinfection process)</p>

Use area restrictions

In addition to the treatment requirements for the recycling of wastewater, the permit will include additional requirements to ensure protection of public health and the environment.

- All use areas must be posted with signs that state that the water used is recycled, nonpotable, and not fit for consumption.
- Setback distance from wells must be in accordance with Well Code, Minn. R. 4725.
- No spray irrigation can occur, other than disinfected tertiary water, within 100 feet of a residence, park, playground, school, or other area with similar public exposure.
- Irrigation must be done in such a manner as to prohibit runoff of recycled wastewater from the site.
- No physical connection shall be allowed between any recycled wastewater source and a potable water source.
- No hose bibs can be installed in areas subject to access by the general public. Only quick connect couplers that differ from those used on the potable water system can be used on the recycled wastewater.

Annual report

In addition to monthly reporting, an annual report is required. The report should include an itemized list of where the wastewater was reused, the volume used at each location, a summary of monitoring results.

Recycled wastewater returned from an industry

In some reuse situations, such as industrial reuse, the industry may not have a separate National Pollutant Discharge Elimination Systems (Permits Program)/State Disposal System (Permit) discharge permit and will return the recycled wastewater to the municipality. While this can be allowed, additional concerns need to be addressed to ensure the returned water does not overload or upset the permitted facility's treatment process.

Additional information

Additional details and information regarding the requirements can be found in the California regulation related to recycled water, January 2009 <http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Lawbook/RWregulations-01-2009.pdf>.

Additional details and information regarding the design and operation of disinfection process can be found in the California "Treatment Technology Report for Recycled Water" <http://www.cdph.ca.gov/certlic/drinkingwater/Documents/DWdocuments/RecycledWaterTechnologylisting2-09.pdf>.

DESIGN DEPOSIT AGREEMENT
FOR PRELIMINARY DESIGN OF
RECLAIMED WATER SERVICE FACILITIES

THIS AGREEMENT is made and entered into between the Metropolitan Council, a public corporation and political subdivision of the State of Minnesota (Council) and Enerkem Inc. (Enerkem).

Whereas, the Council's responsibilities include constructing, operating, and maintaining wastewater interceptors and treatment works in the seven-county Metropolitan Area; and

Whereas, the Council's comprehensive plan, development guide, and water resources policy plan direct the Council to pursue wastewater reuse where economically feasible as a means to promote sustainable water resources; and

Whereas, Enerkem intends to construct a waste-to-biofuel facility in Inver Grove Heights, Minnesota; and

Whereas, Enerkem has requested that the Council provide reclaimed water service to Enerkem's proposed waste-to-biofuel facility; and

Whereas, the Council completed the Southeast Metro Water Reclamation Facility Plan (July 2018) ("Facility Plan"), attached as Exhibit A, for the reclaimed water service facilities and that plan defines the concept for the proposed facilities; and

Whereas, the Minnesota Pollution Control Agency ("MPCA") gave preliminary approval to the Facility Plan, with full approval pending MPCA's public review process; and

Whereas, the Council requires compensation from Enerkem in order to proceed with preliminary design of the Council treatment and pipeline facilities ("Council Facilities") needed to provide reclaimed water service to Enerkem's proposed waste-to-biofuels facility.

NOW, THEREFORE, the Council and Enerkem hereby agree as follows:

1) *General Purposes*

- a) The Council will perform, or cause to be performed, the preliminary design of the Council Facilities in accordance with and subject to the terms and conditions of this Agreement in view of ultimately providing reclaimed water service to Enerkem's proposed waste-to-biofuel facility in Inver Grove Heights, Minnesota.

- b) Enerkem will compensate the Council for the preliminary design of the Council Facilities in accordance with and subject to the terms of this Agreement.
- c) Enerkem will compensate the Council for the final design of the Council Facilities subject to the conclusion of a mutually agreeable, distinct Final Design Deposit Agreement to be negotiated in good faith by the parties, provided Enerkem and the Council decide to continue to final design.
- d) The reclaimed water service will be subject to the conclusion of a mutually agreeable, distinct long-term Service Agreement to be negotiated in good faith by the parties, provided both parties decide to engage in the Agreement.

2) Preliminary Design of Council Facilities

- a) Exhibit B shows the general location of proposed Council Facilities and Enerkem waste-to-biofuel facility.
- b) Upon Enerkem providing the Council written notice to proceed, the Council will complete preliminary design of the Council Facilities as described in the Facility Plan and according to the workplan and review and payment schedule shown in Exhibit C.
- c) Upon request of the Council, Enerkem will provide the Council with information about Enerkem's facility that is reasonably necessary to complete the preliminary design of the Council Facilities.
- d) Exhibit C presents the preliminary design tasks and projected timeframes for the Council Facilities.
- e) Exhibit C presents Enerkem's payment schedule for the preliminary design work of the Council Facilities.
- f) At the beginning of preliminary design work, the Council and Enerkem will establish a technical coordination team with members from both Parties. This team will conduct the preliminary design work task reviews presented in Exhibit C and will also facilitate exchange of technical information critical to the preliminary design work.
- g) The Council will begin preliminary design work tasks only after the conditions shown in Exhibit C for those tasks are met.
- h) The Council will provide to Enerkem for review and comment the scopes and fee proposals for each of its preliminary design consultants before the design

consultants begin work. Enerkem will provide the Council with any comments on the scopes and fee proposals within seven business days.

3) *Payment for Design Services*

- a) *Preliminary Design Deposit.* Enerkem will pay the preliminary deposits in accordance with the schedule set out in Exhibit C subject to Enerkem being reasonably satisfied that the consultant's fee and scope proposal for the relevant preliminary design task is within the associated deposit amount budgeted for such task in Exhibit C, or any variation thereof as may be agreed by the parties, provided, however, that the total costs of the preliminary design remain within a \$600,000 envelope. The Council will use the deposits to pay the costs for preliminary design of the Council Facilities. The Council will provide Enerkem information for electronic funds transfer.
- b) *MPCA Grant.* If the Council receives an MPCA grant for the Council Facilities, Enerkem's payment obligations under this Agreement will be reduced by the amount of the grant, as indicated in Exhibit C. The parties will agree to the mechanism for reimbursing Enerkem before Enerkem makes the first deposit under Exhibit C.
- c) *Reporting and Reconciliation.* The Council will report to Enerkem on final costs for preliminary design. The Council will not spend more on preliminary design than the respective design deposit and MPCA matching grant amount. At the completion of preliminary design, if there are unspent deposit funds and the Parties proceed to detailed design, the Council will apply the unspent funds to the cost of the detailed design. At the completion of preliminary design, if there are unspent deposit funds and the Parties do not proceed to detailed design, the Council will return the unspent funds to Enerkem within 60 days after the decision not to proceed.
- d) *Total Cost to Enerkem.* Enerkem's financial obligations to the Council under this Agreement will not exceed \$600,000 less any MPCA grant amounts received.

4) *Termination*

- a) *Termination for Convenience.* Enerkem may terminate this agreement by giving the Council 14 days' written notice. Within 60 days after termination, Council will refund the unspent amounts, if any, of the design deposits.
- b) *Termination for Cause.* If either Party materially breaches this Agreement, the non-breaching Party may terminate this Agreement with 14-days' written notice. If the Council is the non-breaching party, within 180 days after termination, the Council will refund any remaining portion of the design deposit to Enerkem after

subtracting the amounts spent and all direct out-of-pocket damages the Council incurred as a result of Enerkem's breach. If the Council is the breaching party, within 60 days after termination, the Council will refund any remaining portion of the design deposit after subtracting the amounts properly spent pursuant to the terms hereof to the date of termination and all direct damages and out-of-pocket costs Enerkem incurred as a result of the Council's breach.

5) *Survival.* Upon termination of this Agreement, all of the Parties' rights and obligations hereunder will terminate and cease to be of any further force or effect, provided, however, that such termination or expiration will be without prejudice to any rights or remedies arising from the Parties' performance or non-performance of such obligations prior to the date of such termination or expiration.

6) *General Provisions*

a) *Liability.* Each Party is responsible for its own acts. The Council does not waive any immunities or liability limitations conferred on it by state or federal law.

b) *Intellectual Property.* All work products created under this Agreement are the property of the Council.

c) *Release of Government Data.* The release of data from any Council file relating to this Agreement, is governed by Minn. Stat. § 13.01, *et seq.* ("Minnesota Government Data Practices Act"); Minn. Stat. § 15.17 ("Official Records Act"), and any other applicable law. The Council will presume all data submitted by Enerkem are public unless: 1) Enerkem requests in writing that a particular item be treated as non-public in accordance with the Minnesota Government Data Practices Act or other applicable law; and 2) the Council determines that the request is permitted by law. If Enerkem receives a request for data under the Minnesota Government Data Practices Act, Enerkem will immediately notify the Council.

d) *Amendment.* Any amendments to this Agreement must be in writing and signed by both parties.

e) *Assignment.* Neither Party may assign this Agreement without the written permission of the other Party.

f) *Force Majeure.* The obligations of the Parties under this Agreement, other than payment, are subject to force majeure (which includes strikes, riots, floods, accidents, regulatory or legislative actions, Acts of God, and other causes or circumstances beyond the reasonable control of the Party claiming such force

majeure as an excuse for non-performance), but only as long as, and to the extent that, such force majeure prevent performance of the obligations.

- g) *Governing Law.* This Agreement will be construed and enforced under the law of the State of Minnesota. Venue for any legal proceedings arising out of this Agreement will be in the state or federal court with jurisdiction in Ramsey County, Minnesota.
- h) *Notices.* Any notice from one Party to the other Party will be deemed given and received when mailed or e-mailed to the other party at the following addresses or at such other addresses as the Parties may designate in writing to each other:

Enerkem:

David McConnell, VP Commercial Development North America
1130 Sherbrooke Street, Suite 600

Montreal, Quebec

H3A 2M8

Facsimile: (514) 875-0835

Email: dmccconnell@enerkem.com c.c. legal@enerkem.com

Metropolitan Council

Attn: Jeannine Clancy

Assistant General Manager

Environmental Services

390 Robert Street North

St. Paul, MN 55101

Jeannine.clancy@metc.state.mn.us

IN WITNESS THEREOF, the Parties have caused this agreement to be executed by their authorized representatives. This agreement is effective on the date when it has been signed by all of the Parties' authorized representatives.

METROPOLITAN COUNCIL

By _____
Its: Regional Administrator

Date: _____

ENERKEM

By _____
Its:

Date _____

EXHIBIT A

Southeast Metro Water Reclamation Facility Plan

The Plan can be found at: [https://metro council.org/Wastewater-Water/Services/Wastewater-Treatment-\(1\)/Wastewater-Reuse/Reuse-Publications/Southeast-Metro-Water-Reclamation-Facility-Draft.aspx](https://metro council.org/Wastewater-Water/Services/Wastewater-Treatment-(1)/Wastewater-Reuse/Reuse-Publications/Southeast-Metro-Water-Reclamation-Facility-Draft.aspx)

EXHIBIT B

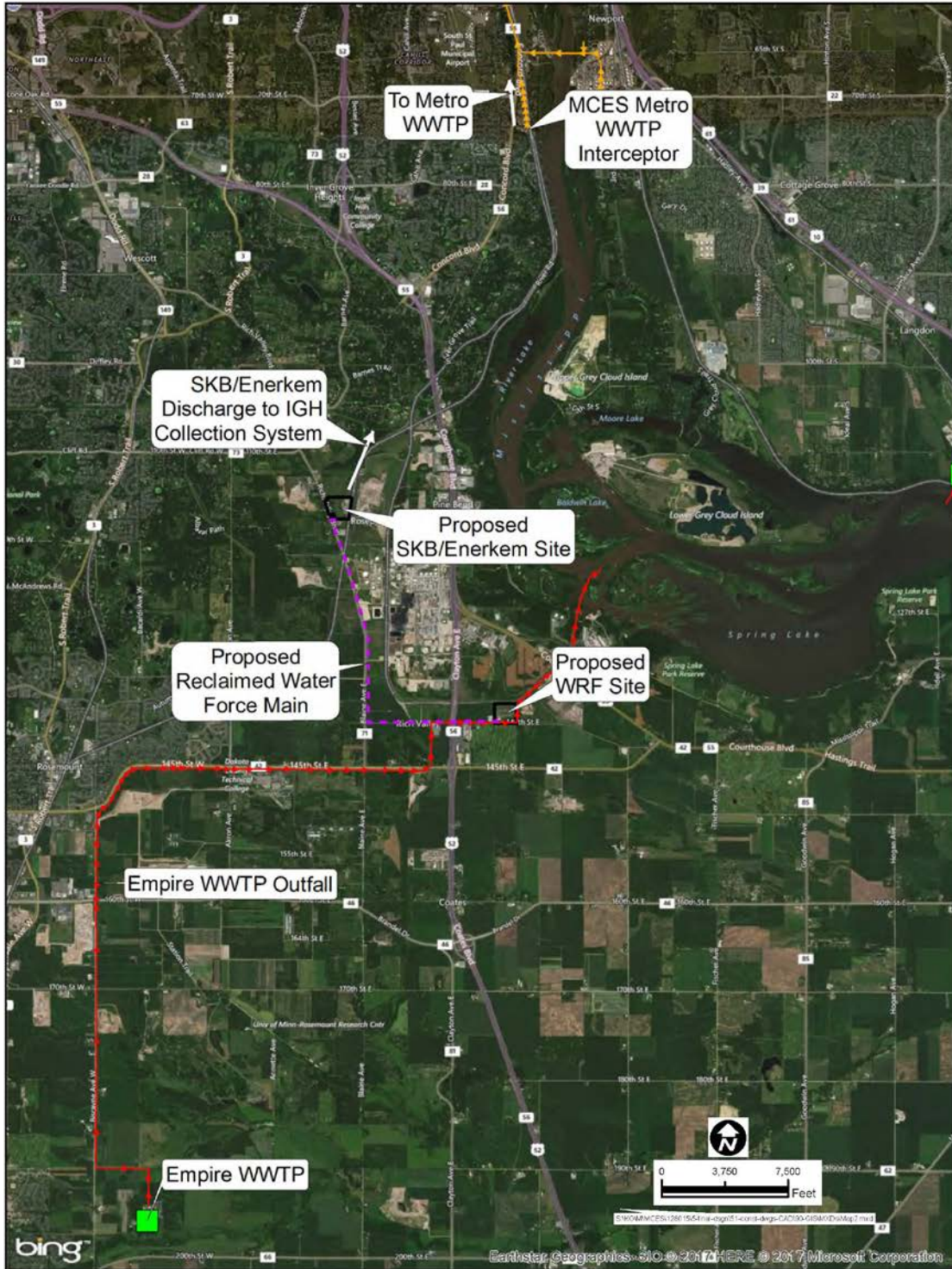


EXHIBIT C
 COUNCIL FACILITIES PRELIMINARY DESIGN
 WORKPLAN, REVIEW, AND PAYMENT SCHEDULE

Work Tasks	Work Duration	Review & Payment Schedule
<p>1. Concept review & information exchange</p>	<p>1 month</p>	<ul style="list-style-type: none"> • Enerkem to deposit \$100,000 to initiate task (\$50,000 to be reimbursed by Council upon receipt of MPCA grant funds) • Council will require information about Enerkem’s waste-to-fuel facility to accomplish its preliminary design work. Information includes but is not limited to: waste-to-biofuel facility location; reclaimed water point of discharge characteristics such as location, elevation, pressure; storage, if any, at waste-to-biofuel site; etc.). Parties will jointly identify what information is required prior to beginning tasks 2 – 11 below and what information can be provided at a later time during preliminary design. • Enerkem to provide a letter providing information required prior to initiation of tasks 2 – 11 below. • Facility Plan to form basis of preliminary design requirements • At completion of task, both Parties to sign letter agreeing to preliminary design concepts for Council Facilities
<p>2. Wastewater treatment, storage, and pumping layout, sizing, equipment, etc. 3. Pipeline alignment, material, size, and methods of crossing</p>	<p>6 months</p>	<ul style="list-style-type: none"> • Enerkem to deposit \$450,000 to initiate tasks 2 – 11 (\$225,000 to be reimbursed by Council upon receipt of MPCA grant funds). Allocation of

<p>roads, railroads, pipelines, and other utilities</p> <ol style="list-style-type: none"> 4. Easement Acquisition Plan 5. Wetland Delineation Surveys 6. Phase 1 Land Surveys 7. Phase 1 Environmental Assessments 8. Cultural Resources Studies 9. Geotechnical Investigations 10. Preliminary Operation Plan 11. MPCA Permit Application 12. Preliminary Design Report 		<p>funds to tasks is estimated as follows:</p> <ul style="list-style-type: none"> ○ Tasks 2 and 3: \$200,000 ○ Tasks 4, 5, and 6: \$100,000 ○ Tasks 7, 8, 9: \$100,000 ○ Task 10: \$25,000 ○ Task 11: \$25,000 <ul style="list-style-type: none"> • Enerkem to provide, in writing and according to timeframes previously identified, information identified in task 1 that has not been previously exchanged. • Enerkem to deposit \$50,000 to initiate task 12 (\$25,000 to be reimbursed by Council upon receipt of MPCA grant funds) • Prior to initiation of task 12, Enerkem and Council to review results of tasks 1 – 11 and agree, in writing, to results to be documented in Preliminary Design Report
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