



MEETING NOTICE
RAMSEY/WASHINGTON RECYCLING & ENERGY BOARD
FACILITY & FINANCE COMMITTEE

Date: Thursday, July 30, 2026
Time: Immediately following adjournment of R&E Board Business Meeting
Location: Ramsey/Washington Recycling & Energy Center | 100 Red Rock Road | Newport, MN | 55055 | Tours Building, Mississippi Conference Room | [Map](#)
Public: Members of the public are encouraged to participate remotely or may attend at the Newport address. [Microsoft Teams](#) | Phone Conference ID: 709 49 391# | Call in (audio only): 1-323-792-6297
Pursuant to Minn. Stat. 13D.02, one or more members of the Facility & Finance Committee may participate in the meeting by interactive technology.

AGENDA

- I. **Call to Order, Introductions**
- II. **Approval of Agenda** Action Page 1
- III. **Approval of Minutes – May 14, 2026 Committee Minutes** Action Page 2
- IV. **Business**
 - a. Xcel Feedstock Agreement Action Page 4
- V. **Updates and Reports – No Updates**
- VI. **Adjourn**

NEXT MEETING:

Facility & Finance Committee | To be determined | To be determined | Ramsey/Washington Recycling & Energy Center, Newport



**RAMSEY/WASHINGTON RECYCLING & ENERGY BOARD
FACILITY & FINANCE COMMITTEE MINUTES
THURSDAY, MAY 14, 2026**

A meeting of the Ramsey/Washington Recycling & Energy (R&E) Board Facility & Finance Committee was held at 10 a.m. at the Ramsey/Washington Recycling & Energy Center, 100 Red Rock Road, Newport, Minnesota. Members of the public attended remotely or in person at the Newport address.

MEMBERS PRESENT

Commissioner Kelly Miller – Ramsey County
Commissioner Karla Bigham – Washington County

MEMBERS NOT PRESENT

Commissioner Mary Jo McGuire – Ramsey County

ATTENDING AT RAMSEY/WASHINGTON RECYCLING & ENERGY CENTER, NEWPORT

Elyse Collyer, Melissa Finnegan, Sam Hanson, Caroline Hofmeister, Sam Holl, Trista Martinson, Deb Orth, Matt Phillips, Jim Redmond

ATTENDING REMOTELY

Alisha Black, Alison Cameron, Rae Eden Frank, Annalee Garletz, Kathryn Jordan, Jennefer Klennert, Nicolette Linscott, Andrea McKennan, Daniel Schmidt

CALL TO ORDER

Chair Bigham called the meeting to order at 10:01 a.m. Introductions were made.

AGENDA OF MAY 14, 2026, PRESENTED FOR APPROVAL

Motion by Bigham, seconded by Miller, to approve the agenda. Motion passed.
Ayes: Bigham, Miller. Nays: None.

MINUTES FROM APRIL 9, 2026, PRESENTED FOR APPROVAL

Motion by Bigham, seconded by Miller, to approve the minutes. Motion passed.
Ayes: Bigham, Miller. Nays: None.

BUSINESS

2027 Budget Recommendations for Board Approval

Presented by: Matt Phillips, Accounting Manager

The budgets were presented for review at the April 9, 2026, Facility & Finance Committee meeting and the April 30, 2026, R&E Board meeting. Board principals were presented, along with the budget structure and the 2027 budget timeline. There are no recommended changes to the Programs Budget, Facility Budget or Equipment Maintenance & Replacement Budget (EM&R).

The Facility Budget includes an intentional surplus to meet future EM&R needs.

SUBJECT: R&E Facility & Finance Committee – May 14, 2026

Motion by Bigham, seconded by Miller, to approve Resolution R&EB-FFC-2026-03 2027 Budget Recommendations for Board Approval. Motion passed.

Ayes: Bigham, Miller. Nays: None.

UPDATES AND REPORTS

Facility Update

Presented by: Sam Holl, Facility Director

All the plants are running. Work is underway on the next ten-year agreement with Xcel Energy. Holl noted that R&E is meeting with Dakota County and will be working with other metro counties relative to presort requirements.

Strategic Partnerships Manager Melissa Finnegan reported that the infectious waste bill is still viable. The stand-alone bill passed in the Minnesota House and has been sent to the Senate. The language passed in both the House and Senate, but the full bill will need to be passed by both legislative bodies.

R&E Executive Director Trista Martinson reported that R&E is currently undergoing IT upgrades. Martinson also noted that Holl has been appointed to the Minnesota Pollution Control Agency (MPCA) packaging extended producer advisory board. Work continues on the study of the Gerdau site's potential development. A final report is underway, and a stakeholder meeting has been scheduled. Martinson noted that R&E would not own the site, rather it would be owned by a public/private partnership.

NEXT MEETING

The next meeting of the Facility & Finance Committee will be held on Thursday, July 9, 2026, at 10 a.m., at the R&E Center in Newport.

ADJOURNMENT

Chair Bigham declared the meeting adjourned at 10:13 a.m.

ATTEST:

Commissioner Karla Bigham, Committee Chair
July 30, 2026

July 30, 2026



**RAMSEY/WASHINGTON
RECYCLING & ENERGY**
CONNECTING VALUE TO WASTE

R&E BOARD FACILITY & FINANCE COMMITTEE MEETING DATE:				July 30, 2026		AGENDA ITEM:		IV.a		
SUBJECT:		Xcel Feedstock Agreement								
TYPE OF ITEM:		☐	INFORMATION		☐	POLICY DISCUSSION		☒	ACTION	
SUBMITTED BY:		Trista Martinson, R&E Executive Director								

FACILITY & FINANCE COMMITTEE ACTION REQUESTED:

- Approve the feedstock supply agreement between Ramsey/Washington Recycling & Energy (R&E) and Northern States Power Company, a Minnesota corporation.
- Recommend to the R&E Board approval of the feedstock supply agreement between R&E and Northern States Power Company, a Minnesota corporation.

EXECUTIVE SUMMARY:

The current refuse-derived fuel (RDF) contract expires December 31, 2027. The two parties have been working together for 39 years. The proposed draft agreement would go into effect January 1, 2028, and expire December 31, 2037. The annual RDF commitment from R&E would be 300,000 tons, which is the same as the current agreement.

Timeline of Research/Evaluation

- **June 2014:** Request for Expressions of Interest – Technologies to Process RDF
- **March 2018:** Phase 1 Request for Proposals (RFP) – Acceptance of RDF for Use in a Gasification Facility
- **October 2018:** Phase 2 RFP – Acceptance of RDF for Use in a Gasification Facility
- **August 2020:** Phase 1 RFP – End-Use Markets for Byproducts from the R&E Center
- **March 2021:** Phase 2 RFP – End-Use Markets for Byproducts from the R&E Center
- **November 2022:** Request for Information (RFI) – End Markets for RDF from the R&E Center
 - **March 2023** – responses due
- **December 2023:** R&E and Xcel sign letter of intent to negotiate in good faith a new RDF Supply Agreement
- **January – June 2024:** R&E and Xcel develop key terms to be used for agreement
- **July – October 2024:** R&E and Xcel work on amendment to current agreement related to PFAS/Environmental Protection Agency ruling
- **August 2025 – July 2026:** R&E and Xcel negotiating terms for full contract draft

ALIGNMENT WITH STRATEGIC PLAN:

- Strategic Initiative 3A.ii: Continue to operate an industry-leading waste processing facility and innovate for increased landfill diversion

SUBJECT: Xcel Feedstock Agreement

ATTACHMENTS:

1. Draft Resolution (R&EB-FFC-2026-04)
2. Draft feedstock supply agreement between Ramsey/Washington Recycling & Energy (R&E) and Northern States Power Company, a Minnesota corporation
3. July 25, 2024, R&E Workshop: Future Management of Refuse-Derived Fuel (RDF) packet

FINANCIAL IMPLICATIONS:

The estimated financial impact will be \$13.35 million annually for 300,000 tons of refuse-derived fuel starting in 2028. The 2028 facility budget will be created and approved during the 2027 budget process. The estimated impact on the existing tipping fee will be an increase of \$13 per ton.

AUTHORIZED SIGNATURES		DATE
R&E EXECUTIVE DIRECTOR		7/24/26
WASHINGTON COUNTY ATTORNEY		7/24/26



RESOLUTION R&EB-FFC-2026-04
Xcel Feedstock Agreement

WHEREAS, The Ramsey/Washington Recycling & Energy Board (R&E Board) is governed by the Amended and Restated Joint Powers Agreement by and between Ramsey County and Washington County dated November 12, 2024 (Joint Powers Agreement); and

WHEREAS, The R&E Board adopted Procurement Guidelines on January 23, 2025 (Resolution R&EB-2025-01), which specify the procurement methods for contracts and purchases; and

WHEREAS, Ramsey and Washington Counties have committed to continue to protect and ensure the public health, safety, welfare and environment of each county's residents and businesses through sound management of solid and hazardous waste generated in each county; and

WHEREAS, Ramsey and Washington Counties have in place County Solid Waste Management Plans approved by the commissioner of the Minnesota Pollution Control Agency, which state the policy goal of maintaining and improving an integrated system of solid waste management that supports Minnesota's hierarchy of solid waste management, with an emphasis on waste reduction, reuse, recycling and composting before the remaining solid waste is managed through resource recovery; and

WHEREAS, The Solid Waste Management Plans also include policies that affirm the processing of waste for recovering energy, recyclables and other beneficially usable materials as the preferred method to manage solid waste that is not reduced, reused or recycled; and

WHEREAS, The R&E Board, and its predecessor, the Ramsey/Washington County Resource Recovery Project Board, have conducted extensive evaluation and analysis of methods to enhance recovery of value from waste; and

WHEREAS, As part of that evaluation, the Ramsey/Washington County Resource Recovery Project Board and R&E Board investigated and evaluated different solid waste management processing technologies; and

WHEREAS, The R&E Board issued a request for information for proposers interested in providing an end market for processing refuse-derived fuel in November 2022; and

WHEREAS, Northern States Power, doing business as Xcel Energy (Xcel), submitted a proposal indicating interest in managing refuse-derived fuel past the expiration date of the current refuse-derived fuel supply agreement between the parties, which is December 31, 2027; and

WHEREAS, On December 7, 2023, both parties executed non-binding letter of intent to R&E to commit to good faith negotiations for a new refuse-derived fuel supply agreement; and



WHEREAS, The letter of intent allowed Xcel to complete their Integrated Resource Plan submission to the Minnesota Public Utilities Commission along with an Annual Remaining Lives filing, while contract negotiations continued; and

WHEREAS, On July 23, 2026, both parties finalized negotiating a draft feedstock supply agreement. NOW, THEREFORE, BE IT

RESOLVED, The R&E Board's Facility & Finance Committee hereby approves the feedstock supply agreement between R&E and Northern States Power Company, a Minnesota corporation. BE IT FURTHER

RESOLVED, The R&E Board's Facility & Finance Committee hereby recommends the R&E Board approve the feedstock supply agreement between R&E and Northern States Power Company, a Minnesota corporation.

Karla Bigham, Committee Chair
July 30, 2026

July 30, 2026

REFUSE-DERIVED FUEL SUPPLY AGREEMENT

This REFUSE-DERIVED FUEL SUPPLY AGREEMENT (this "Agreement") between Northern States Power Company, a Minnesota corporation ("BUYER"), and the Ramsey/Washington Recycling and Energy Board ("SUPPLIER"), a Minnesota joint powers board, is effective as of January 1, 2028 ("Effective Date"). BUYER and SUPPLIER are referred to individually as a "Party" and collectively as the "Parties."

RECITALS

- A. SUPPLIER is the owner and operator of the Recycling & Energy Center located in Newport, Minnesota ("Facility").
- B. The Facility converts waste generated by households, commercial establishments, institutions, and businesses ("Municipal Solid Waste" or "MSW") into refuse-derived fuel ("RDF") and recyclable materials.
- C. BUYER is the operator of electric generating plants in Red Wing, Minnesota (the "Red Wing Plant") and in Mankato, Minnesota (the "Wilmarth Plant") that may utilize RDF as fuel. The Red Wing Plant and the Wilmarth Plant are sometimes herein called, individually, as "Plant" and, collectively, as the "Plants." BUYER also owns and operates ash landfills in Red Wing, Minnesota (the "Red Wing Ash Disposal Facility") and in Mankato, Minnesota (the "Wilmarth Ash Disposal Facility"). The Red Wing Ash Disposal Facility and the Wilmarth Ash Disposal Facility are sometimes herein called, individually, as "Landfill" and, collectively, as the "Landfills".
- D. SUPPLIER desires to deliver certain quantities of RDF to, and BUYER desires to accept and combust certain quantities of RDF at, the Plants, all in accordance with the terms and conditions of this Agreement.

AGREEMENT

In consideration of the above recitals and the promises set forth in this Agreement, the Parties agree as follows:

- 1. **Term.** The Term of this Agreement is from January 1, 2028, through December 31, 2037 ("Term"), subject to early termination rights. This Agreement may be extended by mutual written agreement.
- 2. **No Exclusivity.** BUYER shall have the right to obtain RDF from any source, public or private. Subject to Article 3.1, the SUPPLIER shall have the right to supply any consumer with RDF.
- 3. **Quantity of RDF.**
 - 3.1 **Annual RDF Minimum.** SUPPLIER shall deliver to BUYER at the Plants 300,000 tons of RDF per calendar year during the Term hereof ("Annual RDF Minimum"). Additional amounts of RDF may be delivered in a calendar year pursuant to Article 3.4 below.

3.2 **Annual Forecast.** By September 30 preceding each calendar year of the Term, the Operating Committee, as defined in Article 16 herein, shall meet and, for planning purposes only, prepare a written forecast of projected monthly deliveries of RDF to the Plants for the current or the following calendar year, as the case may be (the "Annual Forecast"). The Annual Forecast will be for the purpose of scheduling deliveries pursuant to Article 5.1 below only and will not be deemed to amend or modify any obligations of, or limit any rights of, the Parties under this Agreement.

3.3 **Reduced Annual RDF Minimum.** At any point during the Term, either Party may request and produce a plan to reduce the Annual RDF Minimum (a "Reduced Annual RDF Minimum"). Such request and supporting plan may be, but are not required to be, presented at the forecasting meeting described in Article 3.2.

A Reduced Annual RDF Minimum shall not take effect for future years unless the SUPPLIER has a viable alternative RDF off-taker and BUYER obtains an equal amount of "make-up" RDF tons from other suppliers of RDF to the Plants ("Suppliers"). No reductions shall be made without advanced mutual written agreement of the Parties, but not before three years have passed since the date on which the Party requesting the reduction notified the non-requesting Party of its desire to reduce the Annual RDF Minimum.

In the event of a request for a Reduced Annual RDF Minimum, one or both of the Parties may also request an adjustment to the Fuel Price and/or Maintenance Fee. Such request shall be in writing and shall demonstrate a need for the requested adjustment(s) to the Fuel Price and/or Maintenance Fee, as defined in Article 7, due to the economic effects of the Reduced Annual RDF Minimum upon the requesting Party's operations. No adjustments shall be made without the mutual written agreement of the Parties.

3.4 **Additional Amounts of RDF.** In addition to the Annual RDF Minimum, SUPPLIER will use commercially reasonable efforts to produce and deliver at the Plants such additional RDF per calendar year that is consistent with the Annual Forecast.

In the event space is limited for BUYER to receive RDF, BUYER shall use reasonable efforts to ensure RDF delivered by all Suppliers is received at the tipping floors of the Plants and/or at associated storage facilities in amounts equal to the proportion assigned to each in the Annual Forecast.

4. Characteristics of RDF

4.1 **Characteristics.** SUPPLIER will use its reasonable efforts to deliver RDF that has the following characteristics (the "Characteristics")

RDF Characteristics

	MINIMUM	AVERAGE	MAXIMUM
Btu/lb	5000	5000-5500	7,500
Moisture	N/A	25%	40%
Particle Size	N/A	8"x8"	12"x12"
Ash (dry)	N/A	15%	20%

The RDF Characteristics shall also include that the RDF shall be free in all material respects of Unacceptable Waste (as defined in Article 4.3 below).

The Parties agree these Characteristics (other than Unacceptable Waste) are general specifications only and the actual characteristics of RDF may vary slightly from seasonal weather effects, MSW sources, and changes in processing methods. SUPPLIER will notify BUYER Plants' leadership of changes in its processing equipment or operations that could result in significant changes to the RDF characteristics at least twelve (12) months before implementing such a change.

In the event SUPPLIER delivers RDF that does not meet the Characteristics, including RDF that contains Unacceptable Waste ("Non-Conforming RDF"), BUYER will accept and process such RDF if BUYER at its sole discretion reasonably determines it is feasible to do so and it does not pose a threat of harm or disruption to BUYER's operations or to the Plants'. If BUYER at its sole discretion reasonably determines it is not feasible to process such RDF or that it does pose a threat of harm or disruption to BUYER's operations or to the Plants', then BUYER may reject and return the Non-Conforming RDF in accordance with Article 4.5 of this Agreement. BUYER has the right but not the obligation to reject Non-Conforming RDF.

If SUPPLIER delivers RDF with Characteristics outside of the limits described in the table in this Article 4.1 on five (5) or more consecutive days (including, without limitation, RDF that does not meet the Characteristics, and is not feasible to accept and process, or poses a threat of harm or disruption to BUYER's operations or to the Plants', including, without limitation, due to the development of operational or RDF processing equipment performance problems which causes the RDF characteristics to become wet or oversized, with an unacceptable amount of rags or other long stringy material, to the point it becomes difficult to manage by BUYER), then, in addition to any rights and remedies it may have under Article 4.5 below, BUYER may notify SUPPLIER of its intent to suspend all shipments of RDF by SUPPLIER after five (5) additional days unless SUPPLIER ceases delivery of Non-Conforming RDF. If SUPPLIER does not cease delivery within the five (5)

day period, BUYER shall have the right to suspend shipments of RDF. This suspension of RDF shipments will continue until SUPPLIER has demonstrated, to BUYER's satisfaction and in BUYER's sole discretion, that the problems have been resolved and the RDF quality will meet the Characteristics for BUYER to accept and process. If the suspension lasts for Sixty (60) consecutive days or more, then BUYER may terminate this Agreement by giving at least Sixty (60) days prior written notice of such termination to SUPPLIER.

- 4.2 **Analysis.** BUYER will be conducting weekly sampling of RDF for BTU content. RDF over 7,500 BTU/lb is to be assessed at an increased Maintenance Fee in accordance with Article 7.2.1 for each week in which a BTU value exceeds 7,500 BTU/lb as demonstrated by the weekly sampling, which results shall be provided to SUPPLIER. In the event BUYER'S weekly sampling of SUPPLIER'S RDF shows a BTU exceedance for two (2) consecutive weeks, BUYER may request SUPPLIER to conduct random sampling of the RDF to determine if the Characteristics are being met. SUPPLIER will extract such samples and prepare them for shipment to BUYER. BUYER will be responsible for shipping, will conduct all testing on such samples at its sole expense, and will deliver testing results to SUPPLIER upon request and without charge. ASTM D4809-13 and ASTM D5865-13 shall be the testing methods utilized to determine compliance with this Article. Such random sampling requests by BUYER shall not exceed one per month.

- 4.3 **Unacceptable Waste.** SUPPLIER will use its reasonable efforts to ensure RDF does not contain Unacceptable Waste. "**Unacceptable Waste**" means waste or other materials that would likely pose a threat to human health or safety or the environment, or may cause damage to or adversely affect the operation of the Plants, including but not limited to: ferrous and non-ferrous metals, mercury; explosives; hospital, pathological or biological waste; hazardous waste or toxic waste (as defined by state, federal and county laws, rules and regulations, as may be amended from time to time); hazardous or toxic chemicals, radioactive materials; oil sludges; asbestos, cesspool, domestic sewage or other sewage sludge; human or animal remains; street sweepings; ash; mining waste; sludges; noncombustible demolition or construction debris, including but not limited to sheet rock, metal studs/framing, metal siding, garage doors, vinyl siding, lights, bricks, block or concrete; liquid; cleaning fluids, used crank case oils, cutting oils, paints, acids, caustics, poisons and drugs; windshields, mirrors or other auto body glass; asphalt shingles; source-separated commercial and/or industrial waste and any other materials as determined by BUYER and communicated to SUPPLIER from time to time. If any government agency or unit having appropriate jurisdiction determines any other chemicals or substances are later considered to be a threat to human health or safety or to the environment, hazardous or toxic, then such chemicals or substances will also be considered Unacceptable Waste. SUPPLIER will also have in place a process to remove ferrous and non-ferrous metals from the RDF. Metals in the RDF can damage Plant equipment and have a negative effect on the Landfill. The most common types of ferrous removal are by mechanical magnet incorporated in the RDF processing line. Non-ferrous is most commonly removed by an eddy current non-ferrous removal system in the

RDF processing line. Any load of RDF that is not substantially free of metals will be considered nonconforming and may be rejected as per Article 4.5. If metals in the RDF continue for a period of five (5) consecutive days or longer, BUYER may notify SUPPLIER that it will suspend all RDF shipments after five (5) additional days until SUPPLIER has demonstrated, to BUYER's satisfaction and in BUYER's sole discretion, that the ferrous and non-ferrous metals are successfully being removed from the RDF.

- 4.4 **Hazardous Materials.** The Parties acknowledge that the RDF may contain per- and polyfluoroalkyl substances (PFAS), which based on existing and/or emerging laws and regulations could be considered and declared hazardous or toxic by third parties, including, but not limited to, Governmental Authorities. The Parties acknowledge that SUPPLIER may deliver, and BUYER may accept, RDF that may contain PFAS. BUYER and SUPPLIER shall respond to any and all PFAS Losses as defined in Article 12.2.5, caused by or arising from the combustion of RDF containing PFAS by Buyer at the Plants, or disposal of ash containing PFAS from the Plants at NSP's current Landfills, as set forth in Articles 7.4, 11.2.3, 12.2, and 16.4, below.
- 4.5 **Rejection of Nonconforming RDF.** BUYER will have up to 72 hours after staging a truckload of RDF at the Plants to reject the truckload (or, at BUYER's sole discretion, any RDF contained in the truckload) for being Non-Conforming RDF. If BUYER notifies SUPPLIER of a delivery of Non-Conforming RDF, BUYER will not be required to pay SUPPLIER the Fuel Price for such Non-Conforming RDF. BUYER will not have any responsibility to separate Non-Conforming RDF from conforming RDF or for the disposition of the truckload containing such Non-Conforming RDF. SUPPLIER will bear the cost to separate out Non-Conforming RDF (should BUYER elect to do so), haul and dispose of the rejected truckload or Non-Conforming RDF portion thereof. Failure of BUYER to reject RDF within 72 hours after staging of a truckload of RDF at the Plants will constitute acceptance of that truckload.
- 4.6 **Additional Disposal/Damage Costs.** Disposal costs for "Rag Monsters" will be charged to each SUPPLIER at the end of the year in proportion to the volume of the fuel provided. In the event that RDF delivered by SUPPLIER is determined to be the source of ignition of the occurrence of any fire incident causing or resulting in any damages within or to, respectively, BUYER'S Barn or Plants, SUPPLIER shall be liable for said damages up to amount of available insurance as required under Article 11.1.4 of this Agreement.
- 4.7 **Metal Recovery.** SUPPLIER shall not make changes to metal recovery equipment that would materially increase the metal content of its RDF without prior written consent from BUYER.

5. Delivery Terms

- 5.1 **Delivery Schedule.** Unless there is a Scheduled Outage pursuant to Article 9.1 of this Agreement or an Unexpected Interruption pursuant to Article 9.2 of this Agreement, or unless the Parties agree otherwise, SUPPLIER will

deliver RDF to the Plants every day of the year consistent with the Annual Forecast. It is anticipated that deliveries will be curtailed during Scheduled Outages (as defined in Article 9.1 of this Agreement), as well as Unexpected Interruptions (as defined in Article 9.2 of this Agreement) at the Plants.

5.1.1 Night deliveries shall be a three-truck minimum, equaling fifteen (15) RDF loads to Red Wing Plant and a four-truck minimum equaling twelve (12) RDF loads to Wilmarth Plant. Night deliveries must occur seven (7) days per week.

5.2 **Delivery Activities.** SUPPLIER will be responsible for all activities required to deliver each shipment of RDF to the Plants, and to stage the RDF trailers at the Plants in compliance with the Delivery Protocol set forth in Article 5.3 below, at which time the RDF shall be considered delivered and SUPPLIER's delivery obligations will have been met. All deliveries will be made Free On Board (FOB) to the walking floor or tipping floor of the Plants, unless otherwise agreed in writing by the Parties.

5.3 **Delivery Protocol.** Unless the Operating Committee (as defined in Article 16 of this Agreement) provides otherwise, SUPPLIER will cause each of its drivers to adhere to the following protocol when making a delivery of RDF to the Plants:

5.3.1 The driver will contact control room to enter gate.

5.3.1.1 The control room operator will direct the driver to an open bay or the RDF storage barn. If directed to an open bay, the control room operator will communicate which bay is available and what trailer is empty and ready for hauling back to the Facility.

5.3.2 To stage trailer in bay, the driver will:

5.3.2.1 Stage trailer at the appropriate bay;

5.3.2.2 Crank down landing gear;

5.3.2.3 Connect hydraulic hoses to trailer;

5.3.2.4 Activate control switches for remote unloading from the control room;

5.3.2.5 Unhook tractor from full trailer;

5.3.2.6 Connect tractor to empty trailer;

5.3.2.7 Clean trailer doors and bumper and do a walk around;

5.3.2.8 Close trailer door and secure;

5.3.2.9 Crank up landing gear;

5.3.2.10 Disconnect hydraulic hoses and store hoses properly;

5.3.2.11 Place the Weight Ticket in the receiving house;

5.3.2.12 Return tractor to the appropriate Facility; and notify the BUYER's control room of any problems that occurred, safety concerns, environmental conditions, or unusual conditions.

5.3.3 To unload in the barn, the driver will:

5.3.3.1 Back trailer into the barn to a suitable location as directed by the control room or barn operator;

5.3.3.2 Open the trailer door;

5.3.3.3 Walk RDF off onto the tipping floor;

5.3.3.4 Clean trailer door and bumper; and do a walk around

5.3.3.5 Close trailer door and secure;

5.3.3.6 Place the Weight Ticket in the receiving house;

5.3.3.7 Return tractor to the appropriate Facility; and notify the BUYER's control room or barn operator of any problems that occurred, safety concerns, environmental conditions, or unusual conditions.

5.4 **Weekly Delivery Conferences.** Designated personnel at the Parties will hold joint weekly conference calls (on Mon, Wed, and Fri) to discuss the anticipated status of the Facility and the Plants (including any outages), quantities of RDF to be delivered and schedule of deliveries, along with any other information that would reasonably assist each of the Parties to fulfill their respective obligations under this Agreement. The Parties may agree at a Weekly Delivery Conference to temporarily alter the Night Delivery Schedule in Article 5.1.1, above, as needed to address unique scheduling considerations.

5.5 **Safety Requirements**

5.5.1 SUPPLIER, its employees, agents and subcontractors will comply with all applicable provisions of BUYER's site control directives applicable to the Plants, including but not limited to any instructions and procedures pertaining to Plants' site security, environmental directives, work authorization equipment control, emergency plans, and hazardous materials. In addition, SUPPLIER will comply with Plants' rules including but not limited to hours, smoking regulations, check-in and check-out procedures, job site safety and security regulations, and emergency plans and procedures.

5.5.2 SUPPLIER will be responsible for all safety precautions in connection with its work and will take all reasonable precautions for the safety of SUPPLIER and its employees, agents and contractors and all other persons at or around the Plants. SUPPLIER will promptly take all reasonable and prudent actions to prevent or mitigate any damage,

injury or loss, regardless of the source of fault, particularly in the event of an emergency.

- 5.5.3 BUYER will provide SUPPLIER with written provisions of BUYER's site control directives applicable to the Plants, as provided under Article 5.5 of this Agreement.

6. Weighing

- 6.1 **Weight Ticket.** SUPPLIER will cause its drivers to deliver a weight ticket (the "Weight Ticket") to the Plants with each delivery of RDF. The Weight Ticket will include the following Information:

6.1.1 Delivery number (which SUPPLIER will generate);

6.1.2 Transport time and date;

6.1.3 Vehicle identification number; and

6.1.4 Gross and tare weight of the vehicle and the net tons of RDF delivered.

- 6.2 **Weighing.** SUPPLIER will weigh all deliveries on the Facility's scale and record the weight on the Weight Ticket. The weight recorded on the Weight Ticket will be used to determine the payments due under this Agreement. BUYER will notify SUPPLIER if BUYER believes there is an inaccuracy in the Weight Ticket, and the Parties will negotiate in good faith to address any discrepancy. If the Parties fail to resolve any such dispute within 30 days, the Parties will resolve the dispute under the procedure set forth in Article 16.3 of this Agreement. Notwithstanding the BUYER will continue to have audit rights under Article 8.3 of this Agreement with respect to the accuracy of the Weight Ticket. The Facility's scale(s) will be certified for commercial use, at SUPPLIER's expense, no less than annually. SUPPLIER will provide BUYER with as much advance notice of when the Facility's scale(s) will be certified so that BUYER may have a representative present during such certification. SUPPLIER will provide to BUYER a copy of scale certifications.

7. Payments and Fees

- 7.1 **Fuel Pricing.** For each ton of conforming RDF that SUPPLIER delivers to the Plants per calendar year, BUYER will pay SUPPLIER Two Dollars and No Cents (\$2.00) per ton (the "Fuel Price").

- 7.2 **Maintenance Fee.** For each ton of RDF that SUPPLIER delivers, and BUYER receives and combusts at the Plants per calendar year; SUPPLIER will pay BUYER a maintenance fee of Forty-Five Dollars and No Cents (\$45.00) per ton (the "Maintenance Fee").

7.2.1 An increased Maintenance Fee of Two Dollars and No Cents (\$2.00) per

ton will be applied for received RDF greater than 7,500 BTU/lb, but less than 10,000 BTU/lb. The increased Maintenance Fee of Two Dollars and No Cents (\$2.00) per ton will be in effect for all tons received until the following weekly fuel sample is less than 7,500 BTU/lb.

7.3 **Escalation.** The Fuel Price and Maintenance Fee shall be automatically increased beginning one (1) year following the Effective Date. The price and fee shall be adjusted annually by an amount equal to the percentage increase of the Consumer Price Index – Midwest All Urban Consumers (CPI-U) of the prior year.

7.4 **Future Event Escalators.**

7.4.1 **Environmental Capital Costs.** SUPPLIER shall be responsible for the incremental capital charges for design and construction at the Plants and/or Landfills if required by or resulting from the adoption, promulgation, issuance, material modification or change in interpretation, after the date of any federal, State regulation, rule, requirement, or ordinance intended for the protection of the environment and any other law directly related to the Plants or to the use of RDF as a fuel at the Plants. A law, regulation, rule, requirement or ordinance is deemed to be modified or changed in interpretation when it is in final form and effective or it will become effective without any further action by any federal, State or local governmental body, administrative agency or governmental official having jurisdiction over the Plants. For example, proposed EPA Clean Air Act regulations could take effect in 2030 or sooner. Additionally, there is potential for treating leachate from Landfills for PFAS. If required, these potential changes are expected to result in the following currently estimated additional costs that will be incorporated into the Maintenance Fee:

7.4.1.1 Selective Non-Catalytic Reduction (SNCR) =
~\$2.73/ton (~\$5 million installation costs)

7.4.1.2 Carbon Injection = ~\$1.06/ton (~\$2 million for
installation costs)

7.4.1.3 Lime = ~\$0.27/ton (~\$500,000 per year in
additional chemical costs)

7.4.1.4 Leachate Treatment = ~\$0.53/ton (~\$1 million for
installation costs).

The above costs are estimated in 2025 dollars; BUYER will provide open books of project costs when establishing final costs to add to the Maintenance Fee.

7.4.2 **Ash Disposal Costs.** If anything occurs with BUYER's current Landfill arrangements that would result in an increased cost to BUYER, including, but not limited to, the need for BUYER to find an alternate disposal option for ash, this shall result in an increase to the Maintenance Fee so that any and all additional ash disposal costs will be passed through to SUPPLIER. BUYER shall provide

documentation to SUPPLIER justifying such cost increase.

7.4.3 Other PFAS Related Costs. BUYER and SUPPLIER shall discuss any other costs that result from the adoption, promulgation, issuance, material modification or change in interpretation, on or after the Effective Date, of any federal, State or local law, regulation, rule requirement, permit condition, or ordinance related to PFAS intended for the protection of the environment ("Environmental PFAS Costs"). This includes, for example, increased fees charged (such as, wastewater disposal fees that may be charged due to the presence of PFAS in leachate). After discussion of any future Environmental PFAS Costs, the Maintenance Fee may be adjusted by BUYER. BUYER shall provide documentation to SUPPLIER justifying such cost increase.

7.4.4 Restrictions on Maintenance Fee Increases. For any increase to the Maintenance Fee arising from BUYER'S additional costs pursuant to Articles 7.4.1, 7.4.2, and 7.4.3, (the "Future Event Escalators"), above, BUYER shall provide prior written notice to SUPPLIER of such adjustment to the Maintenance Fee of at least One Hundred Eighty (180) days, along with the open book project costs causing such adjustment. In no event shall the total increase to the Maintenance Fee arising from the Future Event Escalators exceed Three Dollars and Zero Cents (\$3.00) per ton without the prior written consent of SUPPLIER, or by further amendment of this Agreement.

7.5 Environmental Insurance Fee. For each ton of conforming RDF that SUPPLIER delivers and BUYER receives and combusts at the Plants per calendar month during the Term of this Agreement up to the Annual RDF Minimum, SUPPLIER will pay BUYER an Environmental Insurance Fee of either: (1) One Dollar and Fifty Cents (\$1.50) per ton if paying on a monthly basis each month until the Annual RDF Minimum is reached for the calendar year; or (2) One Dollar and Forty Five Cents (\$1.45) per ton if pre-paying the entire amount owed for the calendar year based on the Annual RDF Minimum by January 1 of that same calendar year (the "Environmental Insurance Fee"). Notwithstanding the foregoing, the Environmental Insurance Fee will not apply to any conforming RDF that SUPPLIER delivers to BUYER that is in excess of the Annual RDF Minimum. This Environmental Insurance Fee will be used to reimburse BUYER for SUPPLIER's percentage share of an Environmental Impairment Liability Insurance policy that BUYER procures for the Parties and other current Suppliers pursuant to Article 13. The amount of the Environmental Insurance Fee may need to be adjusted from time to time by BUYER to address changes in the Environmental Impairment Liability Insurance policy when renewed as described in Article 13. Any proposed adjustment to the Environmental Insurance Fee by BUYER shall be preceded by at least One Hundred Eighty (180) days written notice to SUPPLIER and shall require the written consent of SUPPLIER to become effective. The Environmental Insurance Fee price per ton amount assumes that SUPPLIER has met its Annual RDF Minimum, as required under Article 3.1 of the Agreement. In the event SUPPLIER delivers less than the minimum contractually guaranteed tonnage, there will be a true up of amounts

owed to BUYER for any shortfall at the end of each year.

- 7.6 **Minimum Commitment by SUPPLIER.** If SUPPLIER fails to deliver in any calendar year at least the Annual RDF Minimum, then SUPPLIER will pay BUYER the Maintenance Fee on the excess of the Annual RDF Minimum over the actual tons accepted for use as fuel. Except for the termination rights expressly set forth in Article 14.1.5 of this Agreement, the payments required under this Article 7.6, if any, will be the sole and exclusive remedy available to BUYER in the event the SUPPLIER fails to deliver in any calendar year the Annual RDF Minimum.
- 7.7 **Minimum Commitment by BUYER.** If BUYER fails to accept for use as fuel in any calendar year the Annual RDF Minimum (except to the extent such failure results from the SUPPLIER's failure to deliver), then BUYER will pay SUPPLIER the Maintenance Fee on the excess of the Annual RDF Minimum over the actual tons accepted for use as fuel. Except for the termination rights expressly set forth in Article 14.1.7 of this Agreement, the payments required under this Article 7.7 will be the sole and exclusive remedy available to the SUPPLIER the event BUYER fails to accept and use as fuel in any calendar year the Annual RDF Minimum.

8. Payment Terms

- 8.1 **Documentation.** As soon as practicable following the end of each week, Supplier shall prepare a Weekly Weigh Ticket Report showing the vehicle's gross and tare weights, as well as the net tons of RDF delivered, and electronically deliver it to the Plants. Additionally, SUPPLIER will prepare and provide to BUYER a monthly statement for all RDF delivered in the previous month, no later than the first business day of the following month. The monthly statement will reflect the number of tons of RDF delivered by SUPPLIER to the Plants, the aggregate amount of the Fuel Price and the Maintenance Fee and all other amounts and adjustments, if any, payable pursuant to this Agreement for the prior month.
- 8.2 **Payment; Set Off.** Payment by BUYER and SUPPLIER for RDF-related transactions under this Agreement, including Fuel Price, must be made within 30 days of delivery of the monthly statement. The paying Party will have the right to set off any payments owing to the paying Party by the other Party under this Agreement against any amounts otherwise payable by the paying Party to the other Party under this Agreement. If a Party disputes any portion of the monthly statement, the Party will notify the other Party within 10 business days and the Parties will negotiate in good faith to settle such dispute. Failure of a Party to object within 10 days will constitute acceptance. The undisputed portion of any monthly statement remains payable pursuant to Article 8.1 of this Agreement. Amounts unpaid after 30 days shall accrue interest at the rate established in Minn. Stat. 471.425, subd. 4, as amended ("Interest Rate"). However, such additional charge will not apply to disputed amounts resolved in favor of the disputing Party.

Upon resolution of a disputed invoice, any amounts determined to be payable by the disputing Party shall include interest at the Interest Rate accruing from

the original due date until paid in full. Notwithstanding the foregoing, the Parties will have audit rights under Article 8.3 of this Agreement with respect to the accuracy of the monthly statements.

- 8.3 **Record Retention; Audit Rights.** The Parties will retain all written and electronic documents pertaining to RDF deliveries and consumption for at least six (6) years following the expiration or termination of this Agreement; provided, however, each party may destroy any part or parts of such records upon obtaining the prior consent of the other Party for such destruction. Written documents may be converted to electronic storage media at the option of a Party, so long as the documents are readily retrievable by such Party. Either Party or its designated representative has the right to review all documents reasonably relating to this Agreement upon written request to the other Party. More specifically, SUPPLIER agrees that BUYER, at any time during normal business hours and upon reasonable notice, will have access to and the right to examine and audit any documents or records necessary to verify the tonnage amounts pertinent to the transactions outlined in this Agreement. All expenses incurred by the examining party will remain a cost of such party. In the event that the audit reflects over reporting of RDF tonnage delivered to the Plants, then BUYER will refund all amounts due with respect to such excess. In the event the audit reflects underreporting of RDF tonnage delivered to the Plants, BUYER will invoice and SUPPLIER will pay the Maintenance Fee on such under reported tonnage.
- 8.4 **Data Practices.** All data collected, created, received and maintained by BUYER that is required to be provided to SUPPLIER is subject to the provisions of the Minnesota Data Practices Act (Minn. Stat. Chap. 13).

9. Maintenance Obligations

- 9.1 **Scheduled Maintenance.** By September 30th of each year, the Parties will each provide the other with a schedule of planned maintenance overhauls or project activities to be conducted at the Plants and the Facility during the following calendar year ("Scheduled Outages"). If the schedule changes during the following calendar year, the affected Party will provide the other Party written notice of such change as soon as practical. In order to confirm the actual Scheduled Outages, each Party will notify the other Party at least two weeks before the beginning of such Scheduled Outage. Scheduled Outages of both Parties will typically be in the first half of the year when MSW volumes are lowest.
- 9.2 **Unexpected Interruptions.** The Parties understand that unexpected interruptions in the operation of the Plants or the Facility ("Unexpected Interruptions") may also occur that could require the curtailment of deliveries of RDF. In such an event, the Party experiencing such Unexpected Interruption will notify the other Party as soon as practicable after the beginning of such an interruption. The Party experiencing such Unexpected Interruption will use reasonable efforts to remedy the event causing the Unexpected Interruption and will notify the other Party as soon as possible when the operations are able to resume.

10. Representations and Warranties

10.1 Representations and Warranties by SUPPLIER. SUPPLIER represents and warrants to BUYER as follows:

10.1.1 SUPPLIER is duly organized, validly existing and in good standing under the laws of the State of Minnesota.

10.1.2 SUPPLIER has the power and authority and all permits or authorizations necessary to own and operate its business and property, to own or lease the property it occupies and to conduct the business in which it is currently engaged.

10.1.3 The execution, delivery, performance and observance by SUPPLIER of its obligations under the Agreement is within SUPPLIER's powers, has been duly authorized by all necessary corporate actions and does not and will not: (i) contravene, conflict or violate any provision of any requirement of law presently in effect having applicability to SUPPLIER; (ii) require the consent or approval of or filing or registration with any governmental authority or other person by SUPPLIER (other than routine Minnesota Pollution Control Agency re-permitting); or (iii) result in a breach of or, constitute a default under any contractual obligation to which SUPPLIER is a party.

10.1.4 This Agreement is a legal, valid and binding obligation of SUPPLIER, enforceable against SUPPLIER in accordance with its terms except as enforceability may be limited by applicable bankruptcy insolvency, reorganization or similar laws affecting the enforcement of creditors' rights generally.

10.2 Representations and Warranties by BUYER. BUYER represents and warrants to SUPPLIER as follows:

10.2.1 BUYER is duly organized, validly existing and in good standing under the laws of the State of Minnesota.

10.2.2 The execution, delivery, performance and observance by BUYER of its obligations under the Agreement is within BUYER's powers, has been duly authorized by all necessary corporate actions and does not and will not: (i) contravene, conflict or violate any provision of any requirement of law presently in effect having applicability to BUYER; (ii) require the consent or approval of or filing or registration with any governmental authority or other person by BUYER; or (iii) result in a breach of or, constitute a default under any contractual obligation to which BUYER is a party.

10.2.3 This Agreement is a legal, valid, and binding obligation enforceable against BUYER in accordance with its terms except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization

or similar laws affecting the enforcement of creditors' rights generally.

11. Covenants

11.1 Covenants of SUPPLIER. SUPPLIER agrees as follows:

11.1.1 SUPPLIER will operate its business and the Facility in compliance in all material respects with all Applicable Laws and regulatory requirements.

11.1.2 SUPPLIER shall perform the services with due care, skill and diligence, in accordance with Applicable Laws, professional standards and industry practices, including but not limited to ensuring that the RDF will meet the applicable specifications defined in this Agreement.

11.1.3 SUPPLIER will obtain, maintain and comply with all permits, authorizations, orders, licenses and approvals necessary to operate its business in compliance in all material respects with all Applicable Laws and regulations.

11.1.4 SUPPLIER will purchase and maintain insurance protecting SUPPLIER, its subcontractors, and BUYER from claims arising out of or relating to performance under this Agreement of SUPPLIER or its delegates, appointees, or employees. SUPPLIER will provide evidence of all such insurance to BUYER. Such insurance will be as specified below, and, except for worker's compensation and automobile insurance policies, all insurance policies will name BUYER as an additional insured:

11.1.4.1 Worker's Compensation statutory limit;

11.1.4.2 Employer's Liability in the amount of One Million Dollars (\$1,000,000);

11.1.4.3 Commercial General Liability, providing bodily injury, personal injury, and property damage liability coverage with combined single limits of not less than One Million Five Hundred Thousand Dollars (\$1,500,000); and

11.1.4.4 Comprehensive Automobile Liability with combined single limits of not less than One Million Dollars (\$1,000,000)

These policies will (i) be endorsed to show that the insurers waive subrogation against BUYER, its affiliates, directors, officers and employees, and (ii) be primary and non-contributory. SUPPLIER will provide certificates of insurance acceptable to BUYER prior to effectiveness of this Agreement. These certificates will contain a provision that requires 30 days prior written notice to be given to BUYER before the coverages afforded under the policies may be

canceled except in the event of non-payment of premium, in which case BUYER will receive 10 days notice.

11.1.5 Upon receipt of notice from BUYER of a breach under this Article 11.1, SUPPLIER shall, without additional compensation, correct such breach within a time acceptable to BUYER and reimburse BUYER for any resulting costs, expenses or damages suffered by BUYER.

11.1.6 The rights and remedies of BUYER provided in this Article 11.1 shall not be exclusive and shall be in addition to all other rights and remedies as set forth in this Agreement, under Applicable Laws, or in equity. No failure on the part of BUYER to exercise any right or remedy hereunder shall operate as a waiver of or by BUYER of its right to exercise any other right or remedy.

11.2 Covenants of BUYER. BUYER agrees as follows:

11.2.1 BUYER will operate its business and the Plants in compliance in all material respects with all Applicable Laws and regulatory requirements.

11.2.2 BUYER will obtain, maintain and comply with all permits, authorizations, orders, licenses and approvals necessary to operate its business in compliance in all material respects with all Applicable Laws and regulations.

11.2.3 BUYER will obtain and maintain its usual and customary insurance for the Plants and will provide SUPPLIER with certificates of insurance acceptable to SUPPLIER that contain a provision that requires 30 days prior written notice to be given to SUPPLIER before the coverages afforded under the policies may be cancelled.

11.2.4 Upon receipt of notice from SUPPLIER of a breach under this Article 11.2, BUYER shall, without additional compensation, correct such breach within a time acceptable to SUPPLIER and reimburse SUPPLIER for any resulting costs, expenses or damages suffered by SUPPLIER; provided, however, that this Article 11.2.4 shall not limit, impair, modify, waive, or supersede any indemnity, release, covenant not to sue, insurance right, limitation of liability exception, or other right or remedy in favor of BUYER under this Agreement, including Articles 12 and 13. To the extent of any conflict between this Article 11.2.4 and any such indemnity, release, covenant not to sue, insurance right, limitation of liability exception, or other right or remedy in favor of BUYER, the provision in favor of BUYER shall control.

11.2.5 The rights and remedies of SUPPLIER provided in this Article 11.2 shall not be exclusive and shall be in addition to all other rights and remedies as set forth in this Agreement, under Applicable Laws, or in equity; provided, however, that this Article 11.2.5 shall not limit, impair, modify, waive, or supersede any indemnity, release,

covenant not to sue, insurance right, limitation of liability exception, or other right or remedy in favor of BUYER under this Agreement, including Articles 12 and 13. To the extent of any conflict between this Article 11.2.5 and any such indemnity, release, covenant not to sue, insurance right, limitation of liability exception, or other right or remedy in favor of BUYER, the provision in favor of BUYER shall control. No failure on the part of SUPPLIER to exercise any right or remedy hereunder shall operate as a waiver of or by SUPPLIER of its right to exercise any other right or remedy, except to the extent such exercise would conflict with or impair any indemnity, release, covenant not to sue, insurance right, limitation of liability exception, or other right or remedy in favor of BUYER.

12. Indemnification: Limitation on Damages

12.1 Indemnification. Each Party will indemnify and hold harmless the other Party, and the other Party's successors and assigns, and its employees, officers, directors, affiliates, agents and insurers from and against any and all claims, liabilities, losses, fines, penalties, duties, damages and expenses (including reasonable attorneys' fees and costs) resulting from personal injury (including death) or property damage relating to or arising from the negligence or intentional misconduct of itself, its employees, officers, agents or independent contractors (generally "Losses").

12.2 PFAS Release and Covenant. Except in cases of negligence or intentional misconduct on the part of BUYER, to the extent permitted by law, SUPPLIER shall release and covenant not to sue BUYER, and its employees, officers, directors, parent, Affiliates, agents, for PFAS Losses as defined below. For purposes hereof:

12.2.1 "Applicable Law" means all laws, including but not limited to nuisance, trespass and other common law doctrines, statutes, treaties, codes, ordinances, regulations, certificates, orders, licenses and permits of any Governmental Authority that are applicable to a Party, the business of a Party, the Plants or the Facility, now in effect or hereafter enacted, including amendments to or interpretations of any of the foregoing by a Governmental Authority having jurisdiction, and all applicable judicial, administrative, arbitration and regulatory decrees, judgments, injunctions, writs, orders, awards and/or like actions.

12.2.2 "Governmental Authority" means any federal, state, local or municipal governmental body; any governmental, quasi-governmental, regulatory or administrative agency, commission, body or other authority exercising or entitled to exercise any administrative, executive, judicial, legislative, policy, regulatory or taxing authority or power; and/or any court or governmental tribunal.

12.2.3 "Injuries" means (1) death, personal injury, bodily injury, or property, environmental, or natural resources damages; (2) loss of profits or other economic injury; and (3) disease or actual or threatened health

effect.

12.2.4 "PFAS Contamination" means the presence of PFAS substances at such levels, quantities or location, or of such form or character, that requires investigation, remediation, monitoring, or restoration under Applicable Law.

12.2.5 "PFAS Losses" means all claims, demands, lawsuits (including citizen suits), losses, Injuries, liabilities, costs, fines, penalties, and expenses (including reasonable attorneys' fees), arising out of or related to PFAS Contamination at or emanating from the Plants or BUYER's current Landfills.

12.3 **Limitation of Liability.** EXCEPT WITH RESPECT TO INDEMNITY, INSURANCE AND WARRANTY OBLIGATIONS HEREUNDER, IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGES ARISING FROM, CONNECTED WITH OR RELATING TO THIS AGREEMENT OR TO SUCH PARTY'S ACTS OR OMISSIONS IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT, WHETHER FOR BREACH OF CONTRACT, NEGLIGENCE, STRICT LIABILITY, PRODUCT LIABILITY OR OTHERWISE.

13. Environmental Insurance

13.1 Environmental Impairment Liability Insurance

13.1.1 **Coverage.** BUYER shall obtain and maintain, on terms and conditions acceptable to BUYER in its sole discretion on its behalf and on SUPPLIER's behalf and other fuel providers behalf, Environmental Impairment Liability Insurance coverage for a three year period of coverage, currently set to expire on February 1, 2028, in the amount of Fifty Million dollars (\$50,000,000) to address potential PFAS Contamination and/or offsite PFAS Losses, as defined in Article 12.2.5 of this Agreement. The Parties further agree that BUYER shall use reasonable good faith efforts to renew the Environmental Impairment Liability Insurance coverage that is procured as described in this Article 13.1.1 after each three (3) year period on substantially the same terms and conditions as the initial policy, with both Parties (and other fuel providers) being covered. When such Environmental Impairment Liability Insurance is renewed, BUYER shall provide SUPPLIER with two copies of insurance certificates evidencing such Environmental Impairment Liability Insurance coverage is in force. In the event coverage is triggered R&E and NSP will also meet at least semi-annually to discuss whether the Parties plan to obtain additional coverage, if available, to protect against the erosion of the Fifty Million coverage amount.

13.2 **Certificate Requirements.** Such certificates shall:

13.2.1 name BUYER as insured; name SUPPLIER as an additional insured on a

primary and noncontributory basis;

13.2.2 provide that BUYER and SUPPLIER shall receive thirty (30) Days prior written notice of non-renewal, cancellation of, or significant modification to any of the corresponding policies (except that such notice may be ten (10) Days for non-payment of premiums); and

13.2.3 provide a waiver of any rights of subrogation against SUPPLIER, its parent, Affiliates and their officers, directors, agents, subcontractors, and employees.

13.3 **Notice.** BUYER shall notify SUPPLIER of the following events:

13.3.1 if any claim is submitted against the Environmental Impairment Liability Insurance policy by BUYER;

13.3.2 BUYER'S satisfaction of the self-insured retention;

13.3.3 any effective trigger of coverage against the Environmental Impairment Liability Insurance.

14. Termination

14.1 **Termination.** The Parties may terminate this Agreement as follows:

14.1.1 The Parties may terminate this Agreement at any time upon mutual written agreement.

14.1.2 Either Party may terminate this Agreement after 60 days if the other Party commits a Material Breach (as defined herein below) of this Agreement (other than as a result of a Force Majeure as defined in Article 15 of this Agreement), and the Material Breach has not been resolved after completion of the Dispute Resolution process in Article 16.3. The term "Material Breach" shall mean a failure to comply with any material duty, covenant or obligation in this Agreement in any material respect, or a breach of any representation or warranty in this Agreement and shall include but not be limited to breach of payment obligations under Article 8 of this Agreement. In the event one Party believes the other Party has committed a Material Breach, it shall so notify the other Party in writing of such Material Breach, stating the nature of the breach.

14.1.3 Either Party may terminate this Agreement by providing 180 days advance written notice in the event SUPPLIER does not provide the written consents to fee increases that are required in Articles 7.4 and 7.5.

14.1.4 Either Party may terminate this Agreement by providing 30 days advance written notice to the other Party in the event of any proceedings, voluntary or involuntary, in bankruptcy or insolvency by or against the other Party, or the appointment, with or without such

other Party's consent of an assignee for the benefit of creditors or of a receiver for such other Party, or the going into liquidation voluntarily or otherwise for the making of a composition with creditors of such other Party.

14.1.5 BUYER may terminate this Agreement by providing 30 days advance written notice to SUPPLIER in the event of a catastrophic equipment failure of the steam turbine and/or the steam turbine generator. This notice must detail the nature of the equipment failure and the reasons for termination.

14.1.6 BUYER may terminate this Agreement by providing 180 days advance written notice to SUPPLIER in the event of any of the following:

(i) on or after the date that the Plants must meet any new or revised standards, requirements, obligations, or conditions established in order to comply with a Material Modification of Law [as specifically defined and limited below in Section 14.1.6 (v)];

(ii) SUPPLIER fails to deliver the Annual RDF Minimum stated in Article 3.1 of this Agreement, or its monthly proportionate share in any month, other than as a result of a Force Majeure;

(iii) due to changes in its current or future Resource Plan that results in a proposed retirement of the Plants before 2038;

(iv) if Waste-to-Energy is no longer classified as a renewable energy source by the State of Minnesota.

(v) A "Material Modification of Law" is defined as:

(A) a new or revised federal, state or local law, rule, order or regulation, or

(B) a change in the interpretation of an existing law, rule, order or regulation by any governmental entity (including a federal, state or local government, agency or court), which, in either case,

(1) would require the Plants or Landfills to make a new combined capital investment that would exceed \$3,000,000 and such new combined capital investment is not otherwise paid through an increase in the Maintenance Fee paid by Suppliers, or

(2) would increase the average cost of operation [excluding the capital investment cost described in subclause (1) above] for either Plant or Landfill by five percent (5%) over the cost of operation of that Plant or Landfill for the immediately

preceding year and such increase in average cost of operation is not otherwise paid through an increase in the Maintenance Fee paid by Suppliers, or

(3) would result in a significant new material risk, not reasonably anticipated or foreseeable by BUYER or SUPPLIER as of the Effective Date, for continued operation of the Plants.

Such new significant material risk must relate to a public safety, worker safety, environmental, or liability risk to BUYER and/or SUPPLIER arising from the operation of the Plants or the disposal, management, storage, treatment, transportation, or other handling of ash generated from the RDF; provided, however, that if such risk can reasonably be addressed through a capital investment or operational cost increase, then subclauses (1) or (2), as applicable, shall control and subclause (3) shall not provide an independent basis for termination.

Subclause (3) shall apply only if such risk cannot reasonably be addressed through a capital investment or operational cost increase evaluated under subclauses (1) or (2), and no commercially available insurance product is available on commercially reasonable terms to address such risks, and BUYER and SUPPLIER have first initiated negotiations in good faith upon issuance of the 180 advance written notice of termination, above, to determine whether any feasible technological, operational, contractual, insurance, or other solution is available to mitigate or otherwise address such risk.

14.1.7 This section is left intentionally blank.

14.1.8 SUPPLIER may terminate this Agreement by providing 180 days advance written notice to BUYER: (i) in the event BUYER fails to accept the Annual RDF Minimum stated in Article 3.1 of this Agreement, or its monthly proportionate share in any month, other than as a result of a Force Majeure; (ii) in the event that either Ramsey or Washington County can no longer implement or maintain waste designation ordinances as a result of a Material Modification of Waste Designation Law. A "Material Modification of Waste Designation Law" is defined as: (A) a new or revised federal, state or local law, rule, order or regulation, or (B) a change in the interpretation of an existing law, rule, order or regulation by any governmental entity (including a federal, state or local government, agency or court), which, in either case, terminates or impairs the Counties authority or ability to implement or maintain waste designation ordinances.

14.1.9 SUPPLIER has the ability to terminate this Agreement upon mutual agreement by both Parties that SUPPLIER's Annual RDF Minimum

can be covered by another/other supplier(s) for the remaining Term of the Agreement and if SUPPLIER's reason for terminating the Agreement is to pursue a technology alternative to combustion of waste that is higher on the waste hierarchy.

- 14.2 **Effect of Termination.** Termination under this Article 14 will cause all rights and obligations of the Parties under this Agreement to terminate without any liability on any Party to any other Party, except that termination will have no effect on performance obligations or amounts to be paid that have accrued up to the date of such termination. In addition, the indemnification obligations contained in Article 12 of this Agreement will survive the termination of this Agreement.

15. Force Majeure

Neither Party will be liable to the other for any failure to perform under this Agreement to the extent such performance was prevented by an event of Force Majeure and for the period made reasonably necessary by such Force Majeure. "Force Majeure" means any event beyond the reasonable control of the Party affected and which, with the exercise of due care, the Party could not reasonably have been expected to avoid, including acts of God, acts of terrorism, material changes in law or the interpretation of such law as it applies to the Plants or the Facility, explosions or fires, floods, breakdown of equipment or machinery, hurricanes, tornadoes, lightning, earthquakes, drought, epidemics, blight, famine, quarantine, blockade, acts or inactions of governmental authorities, war or other armed conflict, insurrection, or civil strife, rebellion, sabotage or strike, but does not include (i) any changes in market conditions that affect the cost to either Party of performing this Agreement, (ii) any event to the extent caused by the negligence, willful misconduct or breach of this Agreement by the Party claiming Force Majeure, or (iii) any event to the extent it could have been prevented by reasonable diligence or was otherwise reasonably within the control of the Party claiming Force Majeure. The affected Party will (A) give written notice to the other Party, including full details of the event of Force Majeure, its probable duration, and its creation of an inability to perform, as soon as practicable after the occurrence relied upon, and (B) exercise due diligence to remove its inability to perform with commercially reasonable speed and using commercially reasonable measures.

16. Operating Committee

- 16.1 **Formation of Operating Committee.** The Parties shall establish a committee (the "Operating Committee") consisting of two (2) representatives from SUPPLIER and two (2) BUYER representatives and, if required by either Party, a fifth independent member mutually acceptable to the Parties.

- 16.2 **Meetings.** The Operating Committee, if established, will meet at least annually to review the overall operations of the Plants and the Facility, the production of RDF and the use of RDF during the year. This formal review will include a review of at least the following items:

16.2.1 Actual performance of the Facility, including RDF production rates,

RDF production yields, and RDF quality.

16.2.2 Actual performance of the Plants, including fuel handling activities, heat rates, and residuals disposal.

16.2.3 Scheduled and unscheduled outage events.

16.2.4 Existing and potential RDF production capacities, recycling quantities from resource recovery from the last year.

16.2.5 Existing and potential RDF utilization capacities with Continuous Improvement Topics.

16.2.6 Review other supplier annual volumes.

16.3 **Dispute Resolution.** The Operating Committee shall attempt to resolve any claim or controversy arising out of or relating to the terms of this Agreement, or the performance or non-performance of either Party of its obligations under this Agreement, or a Material Breach, through a Dispute Resolution process involving one or more negotiation meetings. The Dispute Resolution process shall extend for a minimum of 30 days, unless the dispute is resolved in less time. The Parties may mutually agree to extend the Dispute Resolution process beyond 30 days.

16.4 **Mediation.** Except in the event of a Material Breach, if the Dispute Resolution process does not resolve any claim or controversy arising out of or relating to the terms of this agreement, or the performance or non-performance of either Party of its obligations under this Agreement, either Party may initiate mediation by providing written notice to the other Party of the dispute and a request for mediation. The notice shall include a brief description of the nature of the dispute and the relief sought. The Parties shall mutually agree upon a mediator within twenty (20) days of the request for mediation. If the Parties cannot agree on a mediator, either Party may request that a reputable mediation service provider appoint a mediator. The mediation shall be scheduled within thirty (30) days of the appointment of the mediator, unless otherwise agreed by the Parties. All communications, negotiations, and settlement discussions related to the mediation shall be confidential and inadmissible in any subsequent legal proceedings, except as required by law. The costs of the mediation, including the mediator's fees and expenses, shall be shared equally by the Parties, unless otherwise agreed. All statutes of limitation and defenses based on the passage of time applicable to any dispute, controversy, or claim between the Parties shall be tolled while the mediation is pending. The Parties agree to take such action, if any, required to effectuate such tolling. The mediation shall be terminated upon the earliest of the following: (1) the execution of a settlement agreement by the Parties; (2) a written declaration by the mediator that further efforts at mediation are no longer worthwhile; or (3) the issuance of a written notice by either Party to the mediator and the other Party stating that the mediation proceedings are terminated. The mediation process is non-binding. If the Parties are unable to reach a mutually acceptable resolution through mediation, following termination of the mediation, the Parties will resolve their dispute through other

dispute resolution mechanisms.

17. Miscellaneous Provisions

- 17.1 **Governing Law; Venue.** This Agreement and the rights of the Parties will be governed, construed and enforced in accordance with the laws of the State of Minnesota without giving effect to any choice or conflicts of law doctrine that otherwise might be applicable. Each of the Parties submits to the jurisdiction of any federal or state courts sitting in Minnesota in any action or proceeding arising out of or relating to this Agreement.
- 17.2 **Notice.** All notices or other communications under this Agreement must be in writing and will be deemed effectively given upon personal delivery, facsimile transmission (with confirmation of receipt), delivery by overnight delivery service or three days following deposit in the United States Mail as certified or registered mail, postage prepaid, return receipt requested), in each case duly addressed to intended recipient as set forth under its signature to this Agreement. Any Party may send any notice or other communications under this Agreement to intended recipient using any other means (including electronic mail), but no such notice or other communication will be deemed to have been duly given unless and until it actually is received by the intended recipient. The address of a Party to whom notices or other communications is to be sent may be changed from time to time by giving notice to all other Parties to this Agreement.
- 17.3 **Successors and Assigns.** This Agreement will be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. No Party may assign or transfer this Agreement or any of its rights, interests or obligations hereunder without the prior written consent of the other Party.
- 17.4 **Signatures.** This Agreement may be executed and delivered by original signature or facsimile, and in one or more counterparts, each of which will be deemed to be an original copy of this Agreement and all of which, when taken together, will be deemed to constitute one and the same agreement
- 17.5 **Headings.** The Article headings contained in this Agreement are for convenience only and will not in any way affect the meaning or interpretation of this Agreement.
- 17.6 **Severability.** Wherever possible each provision of this Agreement is to be interpreted in such a manner as will be effective and valid under Applicable Law, but if any provision of this Agreement is prohibited by or invalid under Applicable Law, such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.
- 17.7 **Amendment Modification.** This Agreement may be amended or modified only by a writing executed by the Parties. No custom or practice of the Parties at variance with the terms hereof will have any effect.

- 17.8 **Entire Agreement.** This Agreement constitutes the entire agreement and understanding of the parties relative to the subject matter hereof. The parties have not relied upon any promises, representations, warranties, agreements, covenants or undertakings, other than those expressly set forth or referred to herein. This Agreement replaces and supersedes any and all prior oral or written agreements, representations and discussions relating to such subject matter.
- 17.9 **Relationship of Parties.** The relationship between BUYER and SUPPLIER is that of independent contractors. This Agreement is not intended to create and will not be construed as creating between BUYER and SUPPLIER the relationship of principal and agent, joint ventures, partners or any other similar relationship, the existence of which is hereby expressly denied. Neither Party will have any right or authority to assume or create any responsibility or obligation, express or implied, on behalf of or in the name of the other Party. Neither Party will be liable for the debts or obligations of the other Party or for the wages, salaries or benefits of the employees of the other Party.
- 17.10 **Expenses.** BUYER and SUPPLIER will bear their own costs and expenses (including legal fees and expenses) incurred in connection with this Agreement and the contemplated transactions.
- 17.11 **Waiver.** The waiver by either Party of any default by the other Party under this Agreement, or the failure of either Party to insist upon strict performance of any of the terms of this Agreement, will not be deemed to be a waiver by such Party of any future default or of such Party's right to insist upon strict performance by the other Party in the future.
- 17.12 **Construction.** The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement will be construed as if drafted jointly by the Parties and no presumption or burden of proof will arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement: The Parties intend that each representation and warranty have independent significance. If any Party has breached any representation or warranty in any respect, the fact that there exists another representation or warranty relating to the same subject matter (regardless of the relative levels of specificity) that the Party has not breached does not detract from or mitigate the fact that the Party is in breach of the first representation or warranty. All words used in this Agreement will be construed to be of such gender or number as the circumstances require. Unless otherwise expressly provided, the word "including" does not limit the preceding words or terms. The singular and plural will each include the other when the context so requires.

SUBJECT: *Xcel Feedstock Agreement*

The duly authorized representatives of the Parties have executed this Agreement as of the last date below, to be effective as of January 1, 2028.

Ramsey/Washington Recycling & Energy Board

**NORTHERN STATES POWER COMPANY
a Minnesota corporation**

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Address:

Address:

100 Red Rock Road
Newport, MN 55055

3500 Blake Street
Denver, CO 80205

APPROVED AS TO FORM:

John Ristad
Assistant Washington County Attorney



**RAMSEY/WASHINGTON
RECYCLING & ENERGY**
CONNECTING VALUE TO WASTE

**Ramsey/Washington Recycling & Energy Board (R&E Board)
Workshop: Future Management of Refuse-Derived Fuel (RDF)**

July 25, 2024

R&E Board Workshop Agenda

Date: Thursday, July 25, 2024

Time: 11 a.m. – 12 p.m.

Commissioners, Key staff, Presenters:

Ramsey County Environmental Health | 2785 White Bear Ave N. | 2nd Floor Conference Room, Maplewood, MN | 55109 | [Map](#)

Public: Members of the public are encouraged to participate remotely or may attend at the Maplewood address

[Microsoft TEAMS](#) | Phone Conference ID: 257 206 858# | Call In (audio only): 1-323-792-6297

AGENDA

1. Call to order
2. Approval of agenda Action
3. Introduction of workshop purpose
4. Workshop

Workshop Purpose

This workshop aims to equip board members with foundational information for upcoming decisions and gather input. During the workshop, board members will receive:

- An overview of R&E's comprehensive approach to addressing waste
- A staff report and updates on the evaluation of future uses of refuse-derived fuel (RDF) and technologies and management of priorities
- Opportunity for questions and discussion

Workshop Outline

- I. Overview of R&E and counties' solid waste management strategies
 - a. Board guiding principles and strategic frameworks
 - b. Progress on the scope of resource management
- II. Current state & technology review
 - a. Current financial commitments
 1. Anaerobic digestion
 2. Transfer station food scrap bag sortation
 3. RDF end markets
 - b. Partnership with Xcel Energy (Xcel)
 - c. Alternative RDF management technologies
- III. Review of plan and strategy
 - a. Managing priorities
 - b. Cost & environmental considerations
 - c. RDF uses procurement next steps & timelines
- IV. Board member questions and discussion
- V. Adjourn



July 18, 2024

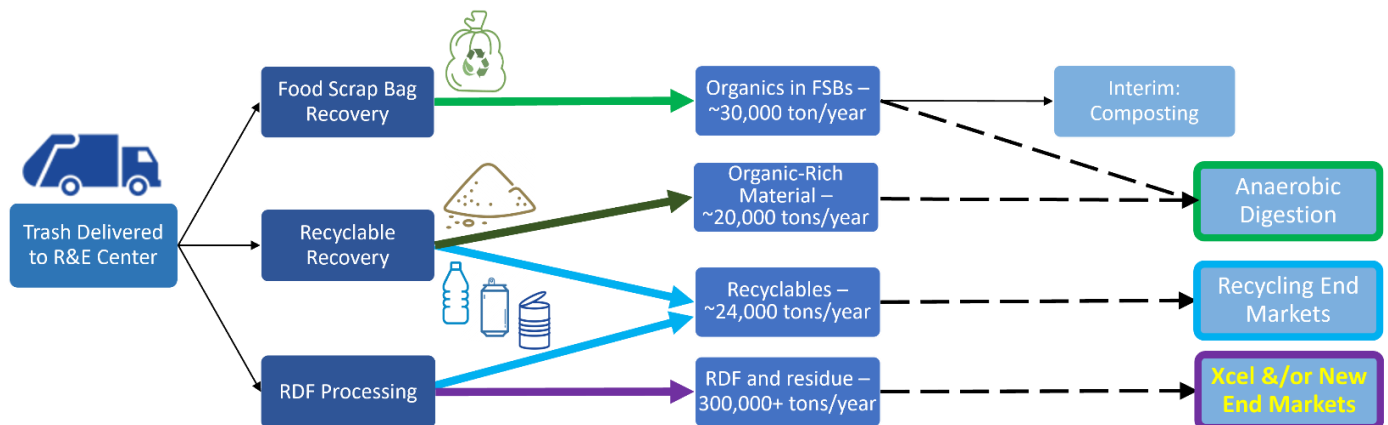
To: Ramsey/Washington Recycling & Energy (R&E) Board
From: Sam Holl, Facility Manager, and Leigh Behrens, Planning Manager
Re: Future Management of Refuse-Derived Fuel

Background

Ramsey and Washington Counties have been evaluating alternative solid waste management technologies for nearly two decades. Through the R&E Board, the counties have prioritized efforts to move high-value materials in waste up the solid waste management hierarchy. In 2019, the R&E Board reaffirmed the direction initially set in 2014, which envisioned a higher use for waste materials. The aim of this work is to achieve environmental, economic and community benefits for the East Metro for the next 20 to 30 years and beyond.

The R&E Center manages about 450,000 tons per year of municipal solid waste (MSW) generated by residents and businesses in Ramsey and Washington Counties. The primary product manufactured from MSW at the R&E Center is refuse-derived fuel (RDF). R&E and the counties move waste up the hierarchy through waste reduction and reuse programs, food scraps recycling, recyclables recovery and the production of RDF as a “value-add” to minimize landfilling.

The diagram below depicts the current system design for the flow of waste delivered to the R&E Center, including planned end markets (indicated by dashed lines).



Over 330,000 tons of RDF are manufactured at the R&E Center annually, diverting this material from landfills. R&E holds an agreement with Xcel Energy (Xcel) for the management of RDF via combustion for electricity generation at two facilities. The fees the R&E Center pays to Xcel under this agreement equate to about \$6.5 million per year. The electricity generated from RDF is enough to power over 13,000 homes annually. This agreement expires on December 31, 2027.

The R&E Board directed staff to pursue opportunities for RDF management beyond 2027, including alternatives to combustion. Work on these solutions included research, analysis, vendor engagement, reference facility site visits and the release of solicitations. These solicitations include:

- **June 2014:** Request for Expressions of Interest – Technologies to Process RDF
- **March 2018:** Phase 1 Request for Proposals (RFP) – Acceptance of RDF for Use in a Gasification Facility
- **October 2018:** Phase 2 RFP – Acceptance of RDF for Use in a Gasification Facility
- **August 2020:** Phase 1 RFP – End-Use Markets for Byproducts from the R&E Center
- **March 2021:** Phase 2 RFP – End-Use Markets for Byproducts from the R&E Center
- **(Current solicitation) November 2022:** Request for Information (RFI) – End Markets for RDF from the R&E Center

In the previous procurement efforts, R&E engaged with several interested parties but did not identify an alternative outlet for RDF that met R&E’s needs.

In November 2022, following robust vendor outreach efforts, R&E released the RFI for providers capable of meeting the R&E Board’s need for RDF end markets. The intent of this solicitation was to re-engage with prior and new vendors throughout the end market technologies industry. Responses were received in spring 2023, and additional engagement has been ongoing. R&E staff and consultants evaluating opportunities have identified the need for direction from the R&E Board regarding considerations and priorities for the future management of RDF, including cost implications, environmental benefits and potential to mitigate pollutants of concern.

Strategic Foundations for RDF Management

The approach to future RDF management is grounded in several elements of established R&E Board strategic direction, including the board principles, vision and mission statements and the scope for resource management.

The R&E Board principles were established in 2014, leading up to the purchase of the R&E Center. These principles are used to frame analysis and decision-making across the organization.

R&E Board Principles

- Plan for a 20- to 30-year horizon
- Assure flexibility
- Manage risk
- Pivot the view from “waste” to “resources” to add value to the local economy and environment
- Move resources up the waste hierarchy

The R&E vision and mission, established in 2019, are also important to how staff look at issues and decisions. The vision provides the strategic aim for the organization, and the mission describes how to embody the vision day-to-day.

R&E Vision Vibrant, healthy communities without waste

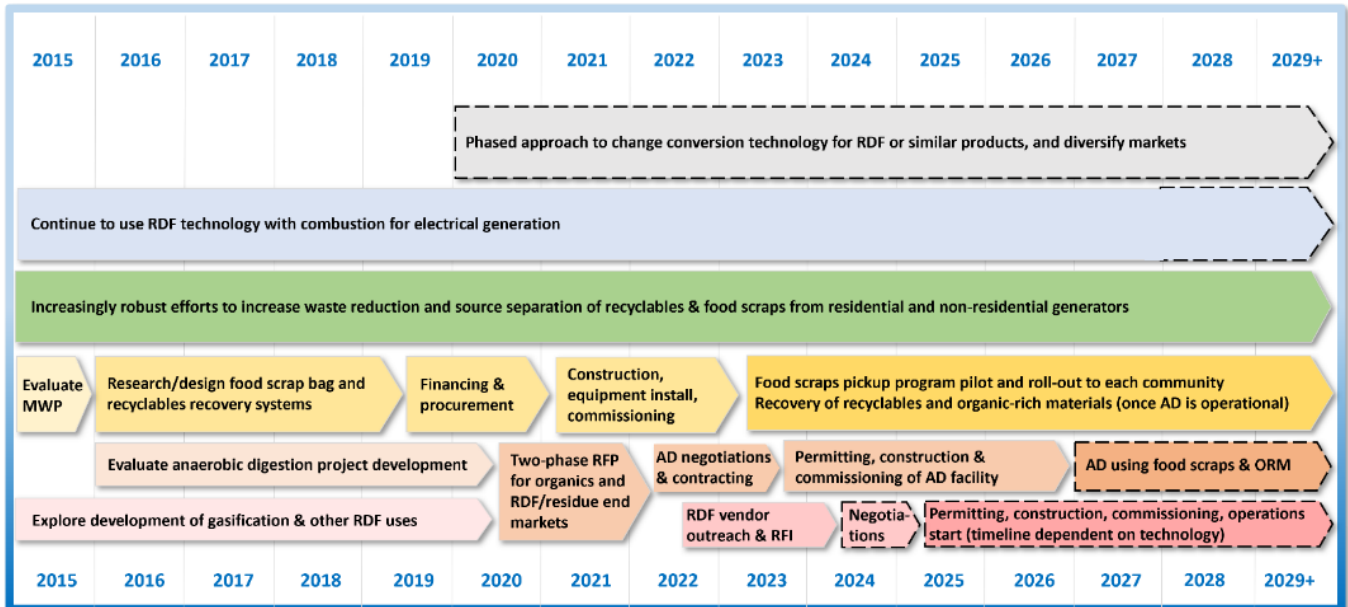
R&E Mission Enhancing public health and the environment by creating value from waste through partnerships

The vision’s use of the phrase “without waste” refers to both reducing waste at the source and the use of discarded materials as valuable resources that benefit the community. The mission’s use of the phrase “through partnerships” refers to R&E’s collaborative approach, such as with the counties, other public entities and the private sector to achieve the R&E vision. This approach gives the counties access to opportunities that would otherwise be out of reach if approaching these goals individually. Both the vision and mission statements ground R&E in the public health lens.

The Scope for Resource Management was established in 2014 to create a roadmap for R&E to transform how discarded materials are managed in the East Metro. The counties' plan has always been to do more to manage waste resources higher on the waste management hierarchy. Using this roadmap, the counties, through R&E, have made intentional investments in research, engineering, capital improvements, new programs and public-private partnerships over the past decade.

Revised* Scope for Resource Management

R&E's Roadmap to an East Metro Without Waste



* Version 3.0 revised October 2023. Exact dates are subject to change.

Note: Steps with dashed outlines represent uncertainty in timing and the need for the previous step to be successful.

The green bar (third from the top) depicts R&E's continuous efforts on waste reduction and recycling at the source – R&E's highest priority. The yellow bar (fourth from the top) shows the R&E Center enhancements, which include the recyclables recovery system and sorting of food scrap bags. Anaerobic digestion, shown in orange (second from the bottom), is anticipated to be operational in 2027.

The red-colored bars (bottom row of the graphic) depict the exploration of RDF management opportunities. Work to explore new, higher uses for RDF began before purchasing the R&E Center. Ramsey and Washington Counties, through the Resource Recovery Project Board at the time and the R&E Board to present, directed staff to explore and evaluate technologies that capture more value from waste beyond combustion for electrical generation.

The culmination of the R&E Board principles, vision, mission and scope for resource management results in an East Metro solid waste management system that delivers clear value to the community, economy and environment. Recent efforts, including facility enhancements and the launch of the Food Scraps Pickup Program, recover valuable components from waste for recycling, composting and, in the future, anaerobic digestion. The next step is to determine how the R&E Center's RDF will be managed to benefit communities and the environment for the next generation.

Current State of East Metro Waste System

The counties have developed a comprehensive approach to addressing waste in the East Metro. By implementing systems that facilitate recycling and processing of high-value waste materials, less materials go to landfills and are instead converted into new products and renewable energy. This has

contributed to a combined recycling rate in the East Metro of over 51% (as of 2022). It also has a substantial climate action benefit, reducing the greenhouse gas (GHG) emissions generated by waste.

Through R&E, the counties are currently rolling out the Food Scraps Pickup Program, which will enable at-home food scrap recycling to all East Metro households, regardless of city, hauler or housing type. This approach uses co-collection of food scraps bags with MSW at no additional cost to participants. Managing organic waste is critical to reaching the state's 75% recycling goal and climate action goals at the county and state level. Implementing this system requires R&E to facilitate new infrastructure to sort food scrap bags and process organics. This is being done by implementing public-private partnerships with waste industry partners.

One such partnership entails sortation of food scrap bags from MSW delivered to transfer stations. As of June 27, 2024, the board has selected Walters Refuse & Recycling and WM to provide this service to the north and central zones of the two counties, respectively. About 67% of residential and multi-unit MSW is delivered to transfer stations, and 33% is hauled directly to the R&E Center. The sortation agreements include a fee that R&E will pay to the two transfer stations to sort MSW containing food scrap bags. R&E will continue to manage the transportation of MSW to the R&E Center after sortation, as well as the delivery of sorted food scraps to a composting or anaerobic digestion facility.

Another public-private partnership for the management of organic waste is with Dem-Con HZI Bioenergy (DCHZI). The agreement signed in September 2023 sets the structure for using anaerobic digestion and a biochar process to manage 50,000 tons of food scraps and organic-rich materials per year. This partnership will generate renewable natural gas and 10,000 tons of biochar and result in a significant reduction of GHG emissions, about 30,000 metric tons of CO₂e annually, compared to if the organic waste went to a landfill. This is equivalent to the emissions of 7,600 cars taken off the road every year. Under the agreement with DCHZI, R&E will pay a tipping fee for the delivery of organic feedstocks for anaerobic digestion.

The agreement with Xcel is the main partnership between R&E and the private sector to manage solid waste responsibly. Under the current contract with Xcel, the R&E Center delivers a minimum of 300,000 tons of RDF annually to waste-to-energy (WTE) facilities in Red Wing and Mankato. This arrangement, combined with robust recycling and education efforts, allows Ramsey and Washington Counties to avoid landfill disposal for nearly 90% of all MSW generated in the counties, one of the highest landfill diversion rates in the state.

The operation of the R&E Center, including the processing and transportation of waste, combined with R&E's cost commitments for loan repayment and fees from partner agreements, calculate into the tipping fee the R&E Center charges to haulers delivering MSW from the two counties' communities. The projection of current commitments is anticipated to translate into an approximate \$160 per ton tipping fee by 2028 (not including consumer price index increases). This provides the starting point for analyzing the cost to transition to new agreements to manage RDF past 2027.

Review of RDF Management Technologies

Combustion with Electricity Generation

In December 2023, the board approved a letter of intent for R&E staff and Xcel to negotiate terms for the continuation of the current agreement for an additional 10 years. Such an agreement would allow the R&E Center to continue delivering RDF to the Red Wing and Mankato WTE facilities through the end of 2037. A new contract is anticipated to include a higher Xcel tipping fee than the current fee

(averaging out at \$18 per ton). The new fee will likely be approximately \$43 per ton, which will translate to an estimated \$13 cost impact to the R&E Center tipping fee.

There are benefits to continuing a partnership with Xcel. A substantial benefit is that these facilities are currently operational, while non-combustion alternatives do not yet exist in Minnesota. It is anticipated to take several years for new facilities to be designed, financed, permitted, constructed and commissioned. Continuing the partnership with Xcel ensures no disruption in the delivery of RDF to an end market facility between 2027 and 2037, while still allowing for exploration of new partnerships.

WTE facilities also reduce the volume of waste that needs to be landfilled – by 72% compared to if unprocessed MSW were delivered directly to landfill. Further, waste combustion has been shown to mitigate per- and polyfluoroalkyl substances (PFAS) in solid waste due to high heat destroying the chemical bonds. Additional benefits to WTE over landfilling of RDF includes GHG emission reductions. New opportunities for carbon capture are also on the horizon for WTE, which would provide additional carbon reduction benefits.

Non-Combustion Alternative Technologies

Beyond combustion, R&E has evaluated alternative technologies that can receive RDF, generate renewable energy and have the added benefit of capturing additional materials for recycling. These technologies involve proprietary processes to sort and recover materials from trash. Examples of these technologies include:

- Advanced pre-processing and anaerobic digestion of RDF
- Advanced pre-processing and secondary material sortation of RDF to recover paper fiber and additional recyclable material

Partnering with a vendor with either type of technology provides several benefits to R&E in alignment with the board's strategic foundations. Transition to a non-combustion technology for RDF realizes the scope of resource management's plan for a "phased approach to change conversion technology for RDF or similar products." Following this phased approach, a new contract with Xcel could allow for a certain proportion of RDF to be delivered elsewhere without a put-or-pay implication. Essentially, such an arrangement would allow for a "ramp-down" of RDF for combustion and a "ramp-up" of delivering RDF to a new facility over several years.

Another major benefit is the ability to recover additional valuable products from waste. RDF can generate renewable energy products such as biogas or other fuel sources. Additionally, proprietary pre-processing and sortation techniques can recover additional recyclables from RDF, an added 10–16% of materials that could be recycled into new products. This, combined with anaerobic digestion and other techniques, reduces the volume of RDF needing additional management by about 50–75%.

The most substantial challenges of adopting a non-combustion alternative for RDF are related to cost implications and the management of byproducts. Based on the evaluation of current options, the cost to deliver RDF to an alternative facility is anticipated to be higher than Xcel fees. At a high level, initial calculations project an increase of around \$50–75 to R&E Center tipping fees upon the full transition to an alternative facility, not including inflation or consumer price index (CPI) changes. Additionally, because these alternatives use a biological and/or mechanical process to manage RDF, the remaining material consists largely of non-recyclable plastics and other materials that produce a substantial amount of heat when combusted (measured in British thermal units, or BTU). This byproduct may not be suitable for combustion due to how WTE facilities are designed, which means it may need to be landfilled instead.

In both combustion and non-combustion scenarios, the R&E Center process of using RDF to generate energy provides a net benefit to public health, the environment and climate action by reducing the amount of GHG emissions generated from Ramsey and Washington County waste. GHG reduction calculations by technology type are being finalized as of this memorandum being published and will be provided to the committee at the July 25, 2024, R&E Board meeting.

The table in **Appendix A** summarizes the options described above. These data points are all approximate and are based on the “baseline” costs post-2027, not including increases due to inflation or CPI.

Review of Strategic Direction

An objective of the July 25, 2024, R&E Board workshop will be for the board to discuss the prioritization of considerations for determining the future management of RDF, recognizing trade-offs that prevent all considerations from being equally applied. The following is the list of considerations for the evaluation of technologies and vendors to manage RDF over the next 10 to 20 or more years.

- Maximizing recycling of materials from MSW
- Reducing the use of combustion
- Continuing to minimize landfilling
- Greenhouse gas emission reduction and state carbon-free requirements
- Community impacts
- Production of renewable energy and beneficial products from waste
- Pollutant reduction (e.g., PFAS management)
- Cost (impact to R&E Center tipping fees)

R&E staff received feedback on this list, the draft workshop agenda and the overall approach at the June 13, 2024, Facility & Finance Committee meeting.

Timeline and Next Steps

The graphic below provides the timeline to date for the current effort to procure future RDF management services.



Following the July 25, 2024, R&E Board workshop, the evaluation team for the RDF management RFI will re-engage with proposers based on the direction from the board. Renewed engagement will include the tolerances and priorities identified by the board to determine the vendor or vendors to be engaged toward securing one or more public-private partnerships to manage RDF post-2027.

Before the end of 2024, staff plan to bring forward a recommendation, first to the Facility & Finance Committee followed by the full board, for selection of one or more vendors to manage RDF. If approved by the board, this will lead to negotiations with vendor(s) for a term sheet, similar to the process for securing a vendor for anaerobic digestion.

The resulting term sheet(s) will come back to the Facility & Finance Committee and R&E Board for approval to enter into negotiations for one or more agreements with vendors. Once consensus on an agreement is reached, it will be brought forward to the board for final approval. If an agreement requires the construction of a new facility to receive RDF, contract execution will start the process of land acquisition, final design, permitting, construction and commissioning. Depending on the type of facility, it is anticipated that this will be a multi-year process.



RAMSEY/WASHINGTON
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CONNECTING VALUE TO WASTE

Appendix A

	Xcel Energy (RDF combustion with electricity generation)	Xcel Energy post-2027	Pre-processing and digestion of RDF	Pre-processing and sortation of RDF for paper/add'l recycling	Landfill only (for comparison, not recommendation)
Approx. cost/ton to deliver RDF to end facility	\$18/ton (avg.)	\$43/ton	\$105/ton	\$150-170/ton	\$82/ton
Annual cost to transport	\$5M to transport to Red Wing & Mankato		TBD based on facility location	NM (non-measurable): assumes location near R&E Center	\$3M to transport to W/M Burnsville Landfill
Annual cost to R&E Facility Budget	\$11.5M	\$17M	\$34.5M	\$45M	\$27M
R&E Center tipping fee impact (current \$25/ton)	\$0/ton	+\$13/ton	+\$52/ton	+\$75/ton	+\$30/ton
Future R&E Center tipping fee	\$130/ton (2025)	\$173/ton*	\$212/ton*	\$235/ton*	\$190/ton*
Additional recycling**	No		Yes - 30% ^{††}	Yes –26% ^{††}	No
Volume reduction [†]	Yes - 72%				No
High BTU fuel byproduct (hard to manage material)	No – converted to ash for landfill disposal		Yes – 47% of feedstock	Yes – 53% of feedstock	No
GHG reduction vs landfill	To be provided – calculations being finalized (anticipated favorable in all cases)				N/A
PFAS reduction	Yes		No	No	No
Carbon capture	Possible		No	No	No

* Assumes base tipping fee of \$160.

** Percent of delivered RDF that is recycled.

[†] Reduction in materials landfilled compared to tons delivered to end market facility.

^{††} High BTU fuel byproduct not included in these datapoints; assumed landfilled for purpose of this table.