

*Amendment 1*

**Washington County  
Waste Management  
Master Plan  
2012 - 2030**

*Trash the waste habit*



Department of Public Health and  
Environment

*August 2, 2016*

DATE August 2, 2016  
MOTION  
BY COMMISSIONER Bigham

DEPARTMENT Public Health & Env  
SECONDED BY  
COMMISSIONER Kriesel

**Master Plan Amendment #1 to Amend Washington County Solid Waste Master Plan 2011-2030**

WHEREAS, Ramsey and Washington Counties (the “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, it is the stated policy of the State of Minnesota, under the Waste Management Act, to manage solid waste in an environmentally sound manner; and

WHEREAS, Ramsey and Washington Counties have in place County Solid Waste Management Master Plans (“Master Plans”) approved by the Commissioner of the Minnesota Pollution Control Agency; and

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

WHEREAS, since 1982 Ramsey and Washington Counties have implemented a joint powers board for researching, developing, and implementing waste processing activities, that has been called the “Ramsey/Washington Waste-to-Energy Project Board” and later the “Ramsey/Washington County Resource Recovery Project Board” (the “Project Board”); and

WHEREAS, from 1987 to 2015 the counties, through the various joint powers boards, contracted for waste processing services with a series of private owners and operators of a waste processing facility in Newport, MN, formerly called the Ramsey/Washington County Resource Recovery Facility (“Facility”); and

WHEREAS, the Counties have adopted an amended and restated the Joint Powers Agreement in September, 2015, and have renamed the joint powers board to be the “Ramsey/Washington Recycling & Energy Board” (R&E Board); and

WHEREAS, the Counties have strongly supported waste reduction, reuse, recycling and composting in the past, and will continue to do so in the future, with the aim of achieving a 75 percent recycling goal by 2030; and

WHEREAS, in 2012 the Counties determined that a merchant approach to waste processing was not possible in the East Metro area, and, pursuant to the Master Plans, the Counties, through the joint powers board, began to explore options to assure the continuation of waste processing, including consideration of public ownership; and

WHEREAS, during the period of 2013 – 2015 the Project Board extensively analyzed and evaluated waste generation and management data, various waste management and conversion technologies, financial information, policy options and information gathered through an extensive public information and comment program (the “Analysis and Evaluation”), and established a vision for future waste management in the East Metro area, which, for processing of waste, includes using the existing resource recovery facility in Newport as a foundation for future efforts to enable greater and improved recycling and recovery of resources from waste (the “Resource Recovery Vision”); and

WHEREAS, as a result of the Analysis and Evaluation, the R&E Board, recognizing the clear environmental, financial and policy benefits to public ownership and operation, purchased the Facility and began public operation on January 1, 2016, and has renamed the Facility the Recycling and Energy Center; and

WHEREAS, Minn. Stat. §473.803 sets forth the requirements for metropolitan County Master Plans and includes specific elements for counties proposing designation to a resource recovery facility and Minn. Stats. §§115A.80 - 115A.893 set forth the requirements for implementing waste designation in Minnesota including the initial step of submitting a waste designation plan; and

WHEREAS, in September, 2015 the Ramsey and Washington County Boards directed that amendments to their respective Solid Waste Master Plans be prepared, and a waste designation plan be jointly developed; and

WHEREAS, amendments to the Ramsey County and Washington County Master Plans (“Plans”) have been prepared to meet the requirements in State law related to implementing waste designation, and drafts of such Plans were reviewed by advisory committees in each County; and

WHEREAS, On July 28, 2016 the R&E Board approved a resolution recommending that the Ramsey and Washington County Boards approve and adopt the amendments to the County Solid Waste Master Plans.

NOW, THEREFORE, BE IT RESOLVED the Washington County Board of Commissioners hereby approves and adopts *Amendment Number 1 to the Washington County Solid Waste Management Master Plan 2011-2030*, direct the Department of Public Health and Environment to execute and submit the Amendment to the Commissioner of the Minnesota Pollution Control Agency for review and approval.

ATTEST: 

COUNTY ADMINISTRATOR



COUNTY BOARD CHAIR

	YES	NO
MIRON	<u>X</u>	-
KRIESEL	<u>X</u>	-
WEIK	<u>X</u>	-
BIGHAM	<u>X</u>	-

## TABLE OF CONTENTS

	Page
I. Amendments to Chapter III Focused on Processing .....	1
II. Background .....	3
III. Change from Merchant Operations to Public Ownership and Operation .....	5
A. Description of the Acquisition .....	5
B. Proposed procedures for operation and maintenance of the Facility .....	8
C. Proposal for use .....	9
1. Sell the land, buildings and equipment, or .....	9
2. Use the land, buildings and equipment for another public purpose.....	9
D. Criteria and Standards to protect comparable private and public facilities already existing in area from displacement.....	10
IV. Waste Designation and the Evaluation of Costs and Benefits.....	10
A. Public Interest/Purpose Served by Designation (Achievement of State, Local and Regional Policies) .....	11
1. Materials Separation and Recovery.....	11
2. Recovery of Energy .....	13
3. Reduction in Waste Generation .....	14
4. Abatement of Landfill Disposal.....	15
5. Environmental Benefits .....	16
6. Coordination of Solid Waste Management Among Political Subdivisions .....	18
7. Orderly and Deliberate Development and Financial Security of Waste Facilities .....	18
B. Estimated Revenues and Expenses.....	19
1. Financial Information.....	19
2. Indirect Costs .....	23
C. Designation Is Necessary for the Financial Support of the Facility.....	25
V. Evaluation of Alternatives to Designation .....	26
A. Background .....	26
B. Availability of Less Restrictive Methods for Ensuring Adequate Waste Supply .....	26
1. Relying on Negotiated Contracts .....	27
2. Publicly Owned Collection Service.....	29
3. Closure of Landfills.....	30
4. Public Entity Waste .....	30
5. Enforcement of Minn. Stat. § 473.848 .....	30
C. Summary of Alternatives to Designation.....	31
VI. Conclusion.....	32

Approved by the Washington County Board of Commissioners on August 2, 2016

**Washington County  
Amendment Number 1 to the Solid Waste Management Master Plan**

The Washington County Waste Management Master Plan, 2012-2030, was approved by the Washington County Board of Commissioners on March 20, 2012 (the "Master Plan"). The Washington County Solid Waste Management Master Plan was adopted by the Washington County Board of Commissioners on March 27, 2012. The Commissioner of the Minnesota Pollution Control Agency approved the Plans on May 24, 2012. This is an amendment to the Washington County Master Plan, focused on waste processing and the implementation of a Ramsey/Washington County Joint Waste Designation Plan, as provided for in Minn. Stats. §473.803 and §115A.84. Specifically, Sections II, IV and V of this Amendment are additive to the Master Plan and address portions of Minn. Stat. §473.803, subs. 1 and 1d, dealing with solid waste facilities owned by public agencies, and plans for required use of resource recovery facilities. Section III provides proposed specific adjustments to Chapter III (County Policies and Strategies/Processing) of the Master Plan.

Because Ramsey and Washington Counties (each a "County" and, together, the "Counties") will be submitting a Joint Designation Plan to the Minnesota Pollution Control Agency ("MPCA") for consideration, and because the Counties work closely on a number of solid waste programs, elements of this Amendment refer to, and discuss, both Counties.

The proposed amendment to the Processing Chapter of the Solid Waste Master Plan is presented below, followed by additional information to support the amendment.

**I. Amendments to Chapter Focused on Processing**

The following changes shall be included in the sections describing the Ramsey County processing policies and strategies in Chapter II, beginning on page 22 and Washington County processing policies and strategies in Chapter III, beginning on page 23 of the existing Master Plans. Plain text reflects existing language that remains unchanged by this Amendment. Text shown in underline reflects additions made by this Amendment. Text shown in strike-through is deleted by this Amendment.

**Washington County Processing Policies**

1. Consistent with the State hierarchy, Washington County affirms processing of waste, for the purpose of recovering energy and recyclable and other beneficially useful materials, as the preferred MSW and non-MSW management method over landfilling for waste that is not reduced, reused, or separately recycled or composted. This policy applies both to waste generated throughout the county and specifically to MSW generated by public entities including contracts for organized collection of solid waste. Pursuant to State law, public entities in Washington County will assure that MSW that they generate or contract for is processed rather than land disposed.
2. Washington County supports the processing of waste in a manner that encourages waste reduction, reuse or recycling, including the separate management of organic waste.
3. Through the Ramsey/Washington Recycling & Energy Board, Washington County shall jointly own with Ramsey County the Ramsey/Washington Recycling and Energy Center in Newport, MN. ~~Washington County supports a merchant approach for waste processing, in which the~~

~~financial risk and benefit of owning and operating a waste processing facility rests with the private sector.~~

4. In making decisions under public ownership of the R&E Center, Washington County will apply the following guiding principles:
  - a. Plan for a 20-30 year horizon;
  - b. Build on the current system and allow changes in processing to emerge over time;
  - c. Assure flexibility;
  - d. Manage risks; and
  - e. Pivot the view from “waste” to “resources: to add value to the local economy and environment.

~~As part of the merchant approach, Washington County expects the following objectives to be met by waste processing facilities operated by the private sector that serve the County:~~

- ~~f. Waste haulers that serve Washington County will have access to processing facilities.~~
  - ~~g. Public entity waste will be accepted at the lowest price offered at processing facilities.~~
  - ~~h. Processing facilities will receive sufficient waste and tipping fee revenue to be sustained as a viable competitive solid waste management business.~~
  - ~~i. Processing facilities will meet performance requirements established in law.~~
5. Washington County will implement a waste designation ordinance, to assure delivery of all waste acceptable at the Recycling & Energy Center that is generated in Washington County.

~~Washington County seeks to eventually eliminate any public subsidy, in the form of Processing Payments or Hauler Rebates, for waste processing. Recognizing that market forces are out of the County's control, some subsidy to assure continued waste processing may be needed.~~

- ~~6. In the event of a failure of the solid waste market to support a merchant approach or other County environmental goals, Washington County will consider the following actions:~~
  - ~~a. Seek to acquire the Resource Recovery Facility in Newport, to maintain its operation as a resource recovery facility—this includes consideration of public operation and the use of flow control; and/or~~
  - ~~b. Pursuant to action taken following the Public Collection study in 2001-2002, move forward with design of a public collection system for residential and commercial solid waste to achieve environmental goals and protect public health and safety; and~~
  - ~~c. Intervene in the market and use public funds to encourage processing.~~

### **Washington County Processing Strategies**

1. ~~Until termination of the Processing Agreement for the Resource Recovery Facility in Newport at the end of 2012, Ramsey and Washington counties will coordinate resource recovery activities through the Ramsey/Washington County Recycling & Energy Board Resource Recovery Project.~~
2. Ramsey and Washington counties will continue to work cooperatively on specific waste management issues through a joint powers agreement ~~after 2012~~ to enhance the efficiency of

waste management services and assist in achieving regional goals in processing in the East Metro area.

3. ~~Until termination of the Processing Agreement for the Resource Recovery Facility in Newport and during merchant operations~~ Washington County will inform and work with municipalities, waste generators, and ~~refuse~~ haulers regarding methods to reduce delivery of unacceptable or non-processible materials to the Facility.
4. Washington County will work cooperatively with the Minnesota Pollution Control Agency as the State enforces provisions found in Minn. Stat. §473.848, requiring waste to be processed before land disposal. Washington County adopts the MPCA criterion for determining when MSW is unprocessable. That criterion is found in Appendix D of the Policy Plan, and reads, in part: "TCMA mixed MSW is unprocessable when all reasonably available capacity within the TCMA processing system is fully utilized at 100% of its operating capacity."
5. Washington County will continue to identify, and evaluate ~~waste processing issues, such as monitoring merchant operations~~ and explore ~~exploring~~ new processing opportunities, including technologies to enhance recycling.
6. Washington County will work with public entities (as defined by Minn. Stat. §115A.471) and the MPCA to ensure MSW is delivered to the Recycling and Energy Center ~~a processing facility~~, including evaluating the amount of MSW generated by public entities, and the volume delivered for processing.
7. Washington County shall prepare a Joint Designation Plan with Ramsey County, and shall follow the process set forth in State law to plan for and implement designation of solid waste.

## II. Background

The solid waste management systems of each County are described in detail in their respective Solid Waste Management Master Plans (collectively, the "Master Plans"). The following information amends and supplements those descriptions, with a focus on waste processing.

The Master Plans are informed by the goals of the Waste Management Act, which are to protect land, air, water, other natural resources, and the public health by improving waste management. Protection of these valuable resources necessarily requires resource conservation -- the practice of reducing the use of water, energy and raw materials. The Counties have worked jointly and in their separate capacities to conserve resources through the Master Plans and other activities since the Waste Management Act was first adopted in 1980.

While each County has its own Master Plan, the management of waste higher on the waste management hierarchy, toxicity reduction, community engagement, and the reduction of the amount of landfilled waste are policies supported by both governing bodies. In addition, both Counties have programs that focus on risk management and prevention that take into account public health, environmental protection, and financial, property and occupational risks during the policy and program development process. This comprehensive approach, taken over three decades, has resulted in an effective and accountable solid waste management system in the East Metro area. As a result, the

Counties have overseen a substantial reduction in the land disposal of solid waste, and a significant increase in reduction, recycling and energy recovery since the late 1980’s including:

- An increase in recycling from a small proportion to over 50 percent (55.1% - Ramsey; 51.5% Washington), including an increase in the recovery of organics (mostly food waste);
- An increase in the percentage of mixed municipal solid waste delivered for processing to energy from 0 percent in to approximately 40 percent; and
- Achievement of an 86 percent landfill diversion rate for mixed municipal solid waste from the two counties.

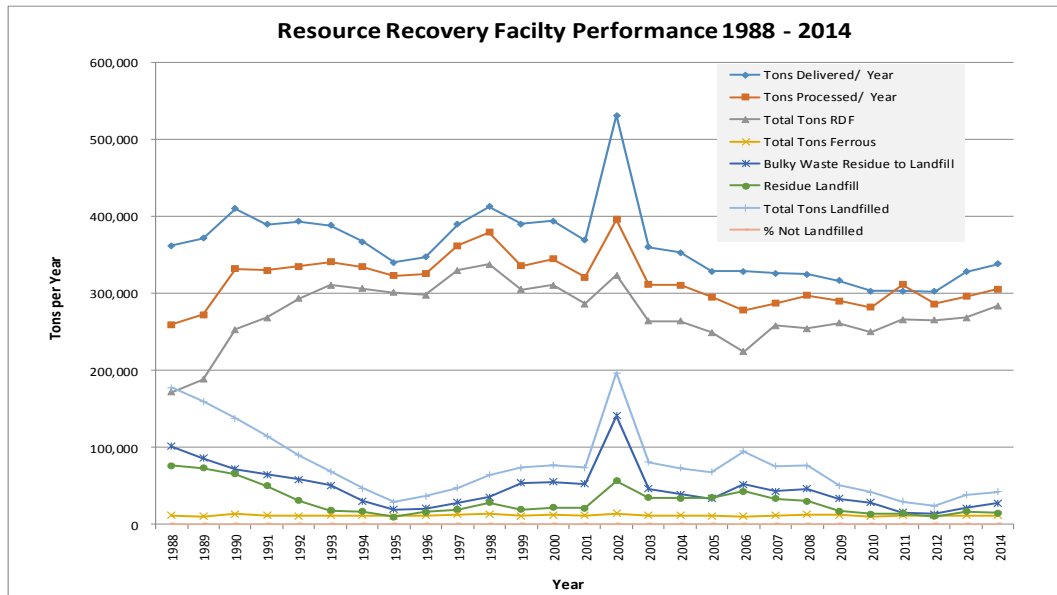
These actions, along with others, have yielded important environmental and public health benefits. The processing of waste into recyclables and energy has prevented the need for 100 acres of landfill capacity at a 40 foot depth, and has also prevented nearly 500,000 metric tons of CO<sub>2</sub> equivalent greenhouse gas emissions from being released into the atmosphere. The Counties’ comprehensive and integrated waste management system including the steady support of the resource recovery facility in Newport, MN (the “Facility”), which is renamed the Recycling and Energy Center (“R&E Center”) has helped ensure that waste management options are available long-term for County residents.

The table below compares the results with the MPCA’s objectives for the metropolitan area.

Metropolitan Area MSW Management Objectives: 2010-2030							
Management Method	Ramsey County (w YW) 2015	Washington County 2015	Combined Ramsey/Washington 2015	2015	2020	2025	2030
Source Reduction				1-2%	2-4%	3-5%	4-6%
Recycling	46.7%	43.6%	46.0%	45-48%	47-51%	49-54%	54-60%
Organics Recovery	6.9%	7.9%	7.1%	3-6%	4-8%	6-12%	9-15%
Resource Recovery	34.7%	43.5%	36.7%	32-34%	32-33%	30-31%	24-28%
Landfill	11.7%	6.3%	10.5%	20%	17%	15%	9%



The graph below shows the historical performance of the Facility toward various waste management outcomes.



**III. Change from Merchant Operations to Public Ownership and Operation**

**A. Description of the Acquisition**

The failure of the market to support a merchant approach was heavily documented during negotiations for an amendment to, and short-term extension of, an agreement for processing waste with the previous Facility owner, Resource Recovery Technologies, Inc. (“RRT”), in 2012. RRT continued to ask for increases to (rather than a phasing down of) the incentives paid by the Counties in order to ensure deliveries to the Facility. As a result, the short-term Processing Agreement, in effect from 2013 to 2015, included a provision that gave the Counties the option to purchase the Facility at the end of the term. In order to evaluate the market the Counties engaged a team of consultants to analyze how the Counties could best proceed to reach ambitious goals set by the state (in particular the 75 percent recycling goal by 2030) as well as those set by the Counties themselves (such as pivoting to thinking of waste as a resource). In conjunction with that analysis, the Ramsey/Washington Resource Recovery Project Board (“Project Board”) conducted a policy evaluation on the future of waste processing in the East Metro area. As with most issues related to solid waste, the evaluation began with the Master Plans.

The Counties’ respective Master Plans outline the ways in which, if the market failed, each County could support waste processing. Specifically, Processing Policy #6 provides:

“In the event of a failure of the solid waste market to support a merchant approach or other County environmental goals, the County will consider the following actions:

1. Seek to acquire the Resource Recovery Facility in Newport, to maintain its operation as a resource recovery facility – this includes consideration of public operation and the use of flow-control; and/or

2. Pursuant to action taken following the Public Collection study in 2001-2002, move forward with design of a public collection system for residential and commercial solid waste to achieve environmental goals and protect public health and safety; and
3. Intervene in the market and use public funds to encourage processing.”

At the conclusion of their analysis and evaluations, the Counties determined the best way forward was to purchase the Facility in order to ensure: a) a long-term and stable management option for County residents, b) the Counties’ ability to reach recycling and other waste management goals, and c) continued progress toward higher and better uses of the waste.

The key milestones in this process included:

**Milestone 1 – Solid Waste Master Plans/Affirming Waste Processing:** The Master Plans were adopted by the respective County Boards in 2012, and approved by the Commissioner of the MPCA in that same year. The Plans established County policies related to processing, and governed the evaluation process.

**Milestone 2 – Framing the Process:** In October 2013, the Project Board considered research to date, and provided direction on the breadth of the evaluation. The policy evaluation has been framed around two key questions, the first related to technology, the second to public sector involvement:

1. How should processing of MSW be integrated into the solid waste system in the East Metro area?
2. What should be the role of the Counties with regard to integrating processing into the solid waste system?

**Milestone 3: Guiding Principles Adopted:** In April 2014, the Project Board approved the following *guiding principles* to frame the future design of the solid waste system in the Counties:

- Plan for a 20-30 year horizon;
- Build on the current system and allow changes in processing to emerge over time;
- Assure flexibility;
- Manage risks; and
- Pivot the view from “waste” to “resources” to add value to the local economy and the environment.

**Milestone 4: Answering Key Question #1- How Should Processing of MSW be integrated into the Systems:**

**Technology** – With regard to the first question, a three-part technology analysis was conducted. The analysis consisted of these parts:

**Technology Scan** – A general world-wide scan of existing and emerging technologies for processing waste, with a high-level feasibility study to discern which technologies may realistically work in the East Metro. This was a review of the processes, vendors, projects and environmental performance for selected emerging technologies. These include gasification, pyrolysis, mass-burn, plasma arc, anaerobic digestion, and mixed waste processing to recover materials for fuel generation (plastics) and recycling.

**Detailed Analysis** – This included a detailed analysis of those technologies most likely to fit the East Metro area. This work was an in-depth review of these technologies, and evaluation of the applicability of the technology to Ramsey and Washington Counties.

**Comparative Analysis** –The comparative analysis examined the technical, policy, legal, permitting, siting, reliability and financial issues and compared the technologies evaluated in the previous task with landfilling and refuse-derived fuel (“RDF”) production.

The analysis and Project Board discussion led to the Development of a “Scope for Resource Management.” At its September 2014 meeting, the Project Board discussed and agreed to the Scope for Resource Management. The Scope is a vision for how the processing elements of the system will emerge over the coming years, and fit within other elements of the County’s master plans.

The Scope includes:

- Increased source separation efforts for recycling and organics from residential and non-residential waste generators;
- The use of mixed waste processing to recover some recyclables and organics that remain in mixed municipal solid waste;
- Organic waste being used as a feedstock for anaerobic digestion; and
- A transition from using RDF for electrical generation to using RDF for gasification to produce transportation fuels and other products.

**Milestone 5: Policy Direction on Waste Assurance and Governance:** During 2014 the Project Board examined policy options in the areas of waste assurance, governance, and Facility ownership. The Project Board decided to continue to examine two principal types of waste assurance: waste designation (flow control) and economic incentives. With regard to governance, after examining several alternatives, the Project Board decided to focus on how the joint exercise of powers can best be used to further the waste processing approaches selected by the Counties. With regard to Facility ownership, the Project Board decided to continue to examine public ownership and private ownership alternatives for the Resource Recovery facility in Newport.

**Milestone 6: Reports on Various Issues:** In 2015 a final series of reports were provided to the Project Board to inform their decision about the role of the Counties. These included:

- Financial Analysis Report
- Risk Analysis Report

- System Changes and Technology Report
- Environmental Factors Report
- Waste Assurance Report
- Governance Report

The Project Board decided to recommend the purchase of the Facility in May, 2015, and the Ramsey County Board and Washington County Board (collectively the “County Boards”) approved the recommendation in June, 2015. That triggered a number of actions, including:

- Negotiating the Asset Purchase Agreement;
- Conducting due diligence to resolve material issues and liabilities;
- Developing a financing structure for the purchase; and
- Developing a transition plan for operations and development of an interim operations agreement.

At its August 2015 meeting, the Counties approved an Asset Purchase Agreement for the Facility, at a purchase price of \$24.4 million, and authorized the renaming of the Project Board, which would henceforth be known as to the Ramsey/Washington Recycling and Energy Board (“R&E Board”). Subsequent actions by the R&E Board and County Boards established a financing structure, revised the joint powers agreement related to waste processing, directed that work begin to plan for and implement waste designation, contracted a transition operator for the Facility, and moved forward with operational planning.

In December 2015, the R&E Board took additional steps related to Facility operational agreements, permitting, and financial issues. It also completed and accepted the conditions precedent to closing on the sale of the Facility, one of the final steps in acquisition. On December 31, 2015, at 11:59 p.m. the sale closed and the R&E Board became the owner of the Facility.

The details of the Board actions and reports related to acquisition can be found at [www.morevaluelesstrash.com](http://www.morevaluelesstrash.com).

#### **B. Proposed procedures for operation and maintenance of the Facility**

The Amended and Restated Ramsey/Washington Recycling and Energy Board Joint Powers Agreement, and the related Bylaws, establish the governance structure for the Facility, which was recently renamed the Recycling and Energy Center. The R&E Board is the owner of the R&E Center, establishes policy, and exercises the authority and powers necessary to carry out its work. Staff from the Counties is assigned to a Joint Leadership Team (“JLT”), which administers the work of the R&E Board and sets the policy and administrative direction.

The R&E Board, as a separate public entity, contracted Ramsey County to act as its fiscal agent, secured legal representation by the respective County Attorney's offices, and receives some administrative staff support from both Counties. The R&E Board hires its own staff, which report to the JLT.

As for the operation of the R&E Center itself, R&E Board contracted with Great River Energy Newport Services, LLC ("GRENS") to operate the R&E Center during the transitional period in 2016 and 2017. The scope of those operations is identified in the Transition Operations Agreement.

Regarding the offtake agreement for the RDF produced at the R&E Center, the R&E Board authorized assumption of the Refuse Derived Fuel Supply Agreement with Northern States Power Company (d/b/a "Xcel Energy" and sometimes referred to herein as "Xcel"), and committed to work with Xcel on a new agreement that will begin in 2018.

To assure retention of important employees, the R&E Board approved an Agreement to Amend and Assume the Labor Agreement with the IBEW Local #23, which is the union representing the processing and maintenance staff at the R&E Center.

The R&E Board also authorized action on a number of agreements to assure that operations continue, and approved a 2016-2017 R&E Center budget to assure funding for the operation and maintenance of the R&E Center.

After the end of the transition period, the GRENS' employees working at the R&E Center will be transferred to public employment as R&E Board employees. The R&E Board will hire a Facility Manager to oversee the operations at the R&E Center, and who will report to the JLT.

As part of the transition process, the policies and procedures used by RRT are being reviewed and updated to conform to the standards of the R&E Board and public operation. This includes standard operating procedures, maintenance schedules, capital improvement planning, safety and security, and inventory management.

### **C. Proposal for use**

The Counties intend to use the R&E Center for several decades and, accordingly, have made plans to finance it. The broader waste management system in the East Metro is organized around delivery to the R&E Center. The location is a prime industrial location in the East Metro and has some room for modest changes or expansions that the R&E Board may pursue. The site, for example, includes sufficient room to add on-site Mixed Waste Processing. The Counties will work to take advantage of this unique location and relationship to the rest of the waste management system to pursue opportunities to upgrade the R&E Center and continue its utility and relevance well into the future.

The R&E Center building, while designed for waste processing, could also have other industrial uses. Some of the equipment is specialized and may be marketable for similar use. Other equipment would be marketable for other uses. In the event it were no longer used for waste management, the counties have two basic options:

1. Sell the land, buildings and equipment, or
2. Use the land, buildings and equipment for another public purpose.

**D. Criteria and Standards to protect comparable private and public facilities already existing in area from displacement.**

The Counties have not identified other private or public waste processing facilities already existing in the East Metro. Waste processing facilities in Sherburne, Hennepin and Goodhue counties process MSW, but generally not MSW generated in the Counties and thus should not be adversely impacted from the public acquisition.

There are existing private transfer stations in Ramsey County that handle various waste streams. The previous owner of the R&E Center, and now the R&E Board, have contracted with these transfer stations to provide a convenient location for haulers to deposit waste for transfer to the R&E Center. The R&E Board intends to continue to work with the existing system of transfer stations that handle waste generated in the Counties for transfer to the R&E Center.

**IV. Waste Designation and the Evaluation of Costs and Benefits**

The Counties have determined that designation is necessary to ensure that waste is managed in a manner that ranks higher on the State's Waste Management Hierarchy. Waste collection within the Counties is predominantly done through privately owned waste collection companies and transfer stations. With available lower-cost landfill alternatives serving the metropolitan area, there is a strong financial incentive for waste from the Counties to leave the East Metro each year for land disposal. The R&E Board and the Counties aim to designate waste in order to assure management of waste in accordance with the hierarchy, and to have certainty of long-term supply, as well as flexibility to continue to improve upon the regional waste management system over time as new technologies or opportunities arise.

About 940,000 tons of MSW were generated in the Counties in 2015, with nearly 78% coming from Ramsey County. Over half of this is currently recovered through a combination of recycling methods. Of the 445,000 tons remaining, approximately 345,000 is currently sent to the R&E Center. In addition to other considerations below, waste designation has the potential to ensure that the approximately 100,000 tons of MSW generated in the Counties but currently sent to landfills are instead delivered to the R&E Center for processing and recovery.

Designation would lessen the use of land disposal by capturing the approximately 100,000 tons per year ("TPY") that are currently landfilled. This, in turn, would further the state policy that metropolitan area waste be processed before being disposed of at a landfill. Although a substantial portion of the Counties' waste is being delivered to the R&E Center and processed to remove metals for recycling and production of RDF, designation would further increase the recovery of resources and energy from waste. Perhaps most importantly, ownership of the R&E Center combined with use of designation will provide the Counties greater control of the long-term future of the solid waste system in the East Metro area. This will enable the Counties to fulfill regional and county goals of using waste as a resource for the most important and highest uses. With increasing recycling and organics goals applying to metropolitan counties, designation will allow the Counties to better implement means to achieve multiple ends that would not otherwise be feasible.

There are a variety of costs, benefits, risks, short-/long-term effects and other factors that are relevant to different types of solid waste facilities and methods of solid waste management. This section of the

Amendment evaluates and discusses estimated costs, and benefits associated with designation of waste to the R&E Center. The public policies and purposes served by the R&E Center and designation are also discussed.

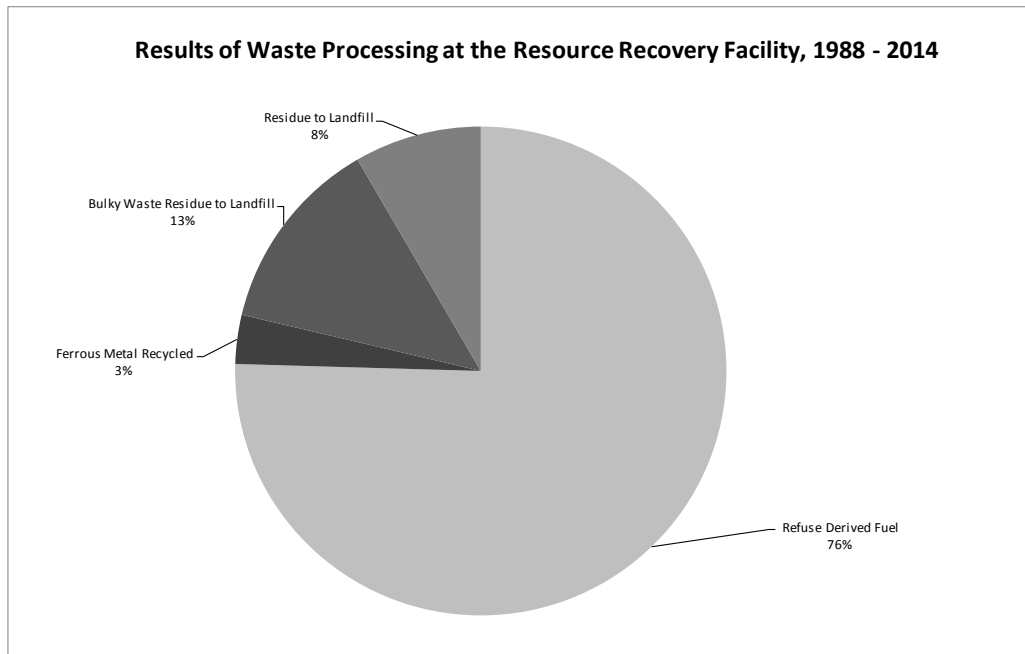
Costs set out for the R&E Center are estimates based on current information available and assumptions that can be made at this time. Many factors can influence costs such as: method of financing, interest rates, term of financing, energy prices and costs, inflation, economic conditions, energy markets, contractual terms and regulatory changes. Therefore the costs estimated herein can vary according to changing assumptions and conditions.

**A. Public Interest/Purpose Served by Designation (Achievement of State, Local and Regional Policies)**

Various sections of this Amendment set forth the public policies and purposes that it serves. The R&E Board spent over three years evaluating how to best achieve both the aggressive state-imposed standards for the metropolitan counties (in particular 75% recycling rate by 2030) and the goals it has to move waste up the hierarchy and toward better uses. It ultimately determined that the most viable way to achieve these goals was to purchase the R&E Center in order to assure the viability of the waste management system in the East Metro region. While ownership of the R&E Center is the first step given its central role in the two-County waste management system, designation allows the R&E Board to access more waste and direct it to higher and better uses. Ultimately, the R&E Board's actions to purchase the R&E Center, and now to enact waste designation are taken to achieve various environmental, public health and waste management goals.

1. Materials Separation and Recovery

In addition to the Counties' various plans for source separated recycling, the R&E Center has long extracted valuable metals out of the waste stream for resale. The R&E Center has routinely recovered over 12,000 TPY of ferrous and nonferrous metals comingled in the MSW stream. From 1988 to 2014, 329,000 tons of metals have been separated from the MSW stream at the R&E Center, equating to approximately \$52 million in revenue for the prior owners of the R&E Center. The environmental benefits of recycling 329,000 tons of metals include saving 8 million MMBTUs, or 1.4 million barrels of oil, or the avoidance of 664,000 tons of CO<sub>2</sub> released into the atmosphere.



The R&E Board has concluded various analyses of the waste stream and options for recovering significantly more resources at the R&E Center as part of its plan to reach the State’s 75% recycling goal by 2030. The composition of the residential and commercial MSW delivered to the R&E Center was most recently analyzed by the R&E Board via a contract with Foth Infrastructure & Environment, LLC (“Foth”) in 2013. That analysis showed that a significant amount of the MSW was organic material that could be recovered for anaerobic digestion or composting. There was also substantial corrugated cardboard found in the commercial MSW stream. See the top 10 materials in the residential and commercial MSW stream as analyzed by Foth below. Otherwise, common recyclables were not appearing in large amounts in the waste sort, indicating the Counties already have fairly highly functioning source separation programs. Even so, County staff estimates there are still traditional recyclables such as cans, bottles and paper remaining in the MSW. In addition, approximately 100,000 TPY of MSW are bypassing the R&E Center under the current system and being delivered directly to landfills in Minnesota and Wisconsin. These volumes include another significant amount of recyclables that could be separated out at the R&E Center if delivered.

Between redirecting more waste to be processed at the R&E Center and enhancing MWP capability to separate out organics and recyclable materials at the R&E Center, there are substantial gains in recycling to be made. In fact, the R&E Board studies aimed at determining how to reach the 75% goal imposed by the State have concluded that it is not possible to meet the goal without using the R&E Center to remove recyclables left in the MSW stream.



*Top Ten Most Prevalent Materials in Residential Waste*

Rank	Material	Percent
1	Food Waste	20.0%
2	Yard Waste	7.6%
3	Textiles & Leather	7.1%
4	Compostable Paper	6.3%
5	Film: Other	4.5%
6	C&D Material	4.3%
7	Carpet & Padding	3.5%
8	Diapers/Sanitary Napkins	3.0%
9	Bulky Material	2.6%
10	Non-Recyclable Plastic	2.5%
<b>Cumulative</b>		<b>61.4%</b>

*Top Ten Most Prevalent Materials in Commercial Waste*

Rank	Material	Percent
1	Food Waste	22.4%
2	Bulky Material	8.4%
3	Treated Wood/ Plywood	8.1%
4	Compostable Paper	6.3%
5	Non-Recyclable Plastic	5.4%
6	Cardboard/Kraft paper	5.3%
7	Clean Lumber/ Pallets/ Crates	5.2%
8	Film: Other	3.3%
9	C&D Material	2.4%
10	Other Organics	2.0%
<b>Cumulative</b>		<b>68.7%</b>

2. Recovery of Energy

The R&E Center is permitted to process up to 500,000 TPY of waste and has routinely processed approximately 400,000 TPY, producing over 325,000 TPY of RDF. In 2014 the RDF produced at the R&E Center resulted in 198,000 MWh of renewable electricity generated at the two power plants. This is equivalent to the annual electrical need of 20,000 homes in Minnesota.

This system involves a couple of stages. The waste is collected throughout the Counties, often consolidated at a transfer station and trucked to the R&E Center where it is processed into RDF. The RDF is then trucked to one of two RDF combustion facilities owned by Xcel in Red Wing and Mankato. Each of Xcel's RDF combustion facilities can combust up to approximately 200,000 TPY of RDF and have routinely each handled approximately 180,000 TPY.

The system as currently designed is relatively large scale and can handle the entire MSW streams generated in the Counties. The combination of the R&E Center and the Xcel RDF combustion facilities

have proven capacity to consistently handle the MSW generated in the Counties. One of the goals of the Metropolitan Policy Plan is to fully utilize this existing waste processing capacity. Even so, the existing capacity is characterized by aging infrastructure that will eventually need to be updated, replaced or retired. The two Xcel facilities were originally constructed in the late 1940s and then updated to combust RDF in the late 1980s. The R&E Center was also constructed in the late 1980s.

In each case, technology has improved substantially, and the R&E Board will continue pursuing alternatives or additional improvements. With respect to Xcel's RDF combustion units, the utility believes it could continue operating through 2027 and is currently scheduling the units for possible retirement at that point. The R&E Board will continue to analyze and pursue options to shift from use of RDF in a combustion unit to produce electricity to use in a gasification unit to produce biofuels. At the time of this Amendment, there are only a handful of operational MSW gasification plants and additional time will give the R&E Board the opportunity to make decisions based on greater industry gasification experience.

With respect to the R&E Center, the technology for producing RDF has advanced beyond the hammer mills used at the R&E Center toward shear shredders that have lower capital and operating costs. Moreover, the R&E Board may eventually determine that it needs to make investments in the RDF processing technology to allow for processing capability to support the higher quality and more precise specifications required by a gasification operation, in contrast to the current combustion operations.

The incremental approach described above will allow maximized use of the existing waste processing infrastructure for the duration of its reasonable useful life but then also allow for a staged and coordinated shift toward more advanced technology at the most appropriate time. Over the long term there could be many shifts that lead to more efficient recovery of energy from the waste. For example, MWP could separate out an organics stream for conversion to a biogas by anaerobic digestion. This will not only produce a valuable energy commodity but will remove a wetter waste stream that is inefficient to combust and problematic for a gasification unit that requires drier material. Further, the shift to gasification allows for more efficient thermal conversion of energy. Perhaps even more importantly, it also allows for energy recovery with less air and water emissions.

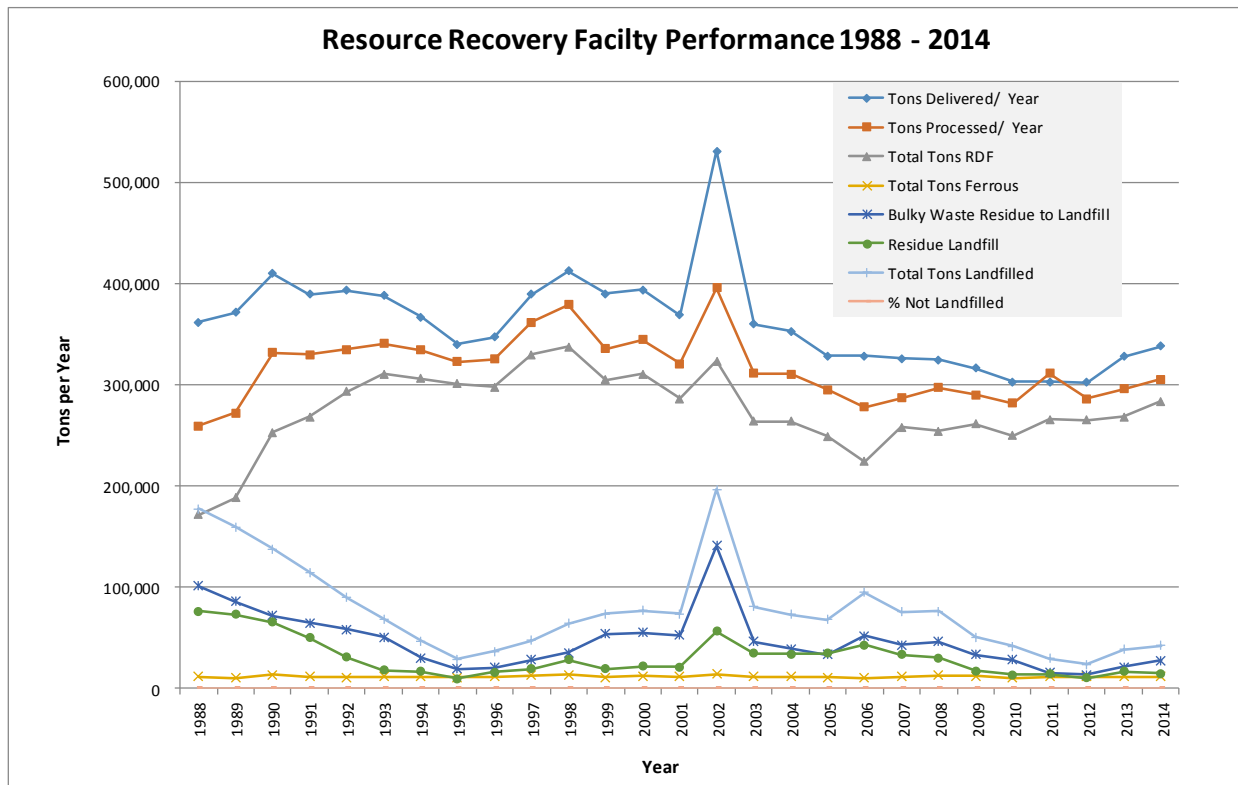
### 3. Reduction in Waste Generation

The R&E Board is planning to gradually reduce the tipping fee rebates for delivery of Ramsey/Washington waste to the R&E Center. Use of less subsidized Waste Delivery Agreements and designation where the true costs of the processing are much more closely borne by generators will inherently create incentive to reduce waste generation. If the R&E Board eventually begins adding additional technology to further capture valuable recyclables and separate out organics for alternate processing, these costs will also eventually be reflected in the tipping fees at the R&E Center, further adding incentive to reduce generation.

While the private operators of the Facility had no incentive to reduce the supply of waste to the Facility, the Counties have broad waste management goals and plans to which they must give effect, while at the same time efficiently operating the Facility. Designation will assist the Counties in seeking to accomplish more with the waste management system. The Counties, for example, could continue to actively reduce waste generation but then make up for less MSW by moving to designate industrial and construction and demolition debris that is currently landfilled.

4. Abatement of Landfill Disposal

The following graph shows the history of waste processing at the Facility, the continual high performance of processing, and the continued low rate of land disposal. This chart spans almost three decades, and shows the result of a strong ongoing commitment by the Counties to the State’s goal to abate land disposal.



Through the processing of waste at the R&E Center, the R&E Board has prevented the need for 100 acres of landfill 40 feet deep. The prevention of this amount of waste going to a landfill has several environmental benefits including protection of groundwater and prevention of methane gas emissions. Additional social benefits include reducing long-term legal liability, avoiding the need to site a landfill in the Counties, and preserving available land for higher and better uses.

Although the R&E Board has achieved important successes without designation, there is still room for improvement. Indeed, designation will allow the R&E Board to prevent MSW that should be processed from going directly to a landfill. Designation allows the R&E Board to ensure that the MSW generated in the Counties will no longer be able to bypass the R&E Center if the hauler does not have a waste delivery agreement with the R&E Board. By ensuring even more landfill abatement, designation increases the environmental benefits already realized through solid waste processing.

## 5. Environmental Benefits

### *a. Environmental and Public Health Benefits*

As mentioned in the previous sections, there are a variety of environmental and public health benefits associated with the pivot to thinking of waste as a resource and continuing to move waste management toward higher and better uses. The Counties embarked on a coordinated effort to pursue resource recovery over landfilling after an unfortunate experience with a landfill in Washington County contaminated the groundwater. Thus reducing the volume of waste and the toxicity of that waste delivered to landfills is of the highest priority for the R&E Board. Under private ownership, it was not clear the R&E Center would remain in use as a solid waste processing R&E Center. The R&E Board's election to buy the R&E Center gives certainty to the Counties that they will not be forced into greater landfilling in the future but instead can make short- and long-term plans that build on the system in place and increase the public benefits.

By implementing waste designation, the Counties will ensure that more Ramsey/Washington MSW is delivered to the R&E Center. The metals will be extracted from that volume of waste and the remaining MSW processed into RDF and delivered to Xcel to generate renewable electricity. These are materials that would have otherwise not been recovered under the current system. Designation will also allow the Counties to seek deliveries of waste to the R&E Center beyond the MSW that is currently delivered, providing for the potential to move waste management of industrial and other solid wastes up on the State's hierarchy.

### *b. Greenhouse Gases*

Greenhouse gas ("GHG") emissions are another measure of environmental performance. The GHG emissions of greatest concern from an emissions perspective are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated chemicals. There are two broad ways that the R&E Center has reduced GHG emissions over time. The first is through the recycling of metals recovered at the R&E Center. Recycling metals reduces the need for mining and processing ore, uses less energy, and therefore has lower GHG emissions. Second, the use of RDF as a fuel source to generate electricity has historically reduced the emissions of GHG associated with fossil fuels that would have otherwise been used to generate that electricity.

On a relative basis, waste management accounts for about 3% of GHG emissions in Minnesota. The MPCA reports that in 2012 total GHG emissions were reported at 154.5 million CO<sub>2</sub>-e tons. The waste sector (associated with landfilling, recycling, waste-to-energy, etc.) amount is 2.2 million CO<sub>2</sub>-e tons. The two Xcel facilities that use RDF from the R&E Center generated an estimated 149,000 CO<sub>2</sub>-e tons, or 0.1% of the State total, or 7% of the waste sector total.

Since 1988 a total of 481,060 metric tons of CO<sub>2</sub> equivalent GHG have been saved over using coal to generate that electricity. That is equal to the CO<sub>2</sub> emissions from

- Over 54 million gallons of gasoline;
- Over 2,500 rail cars filled with coal; or
- Over 1.14 billion passenger car miles.

The immediate impact of waste designation on GHG emission reductions should be fairly nominal given the historic use of the R&E Center for delivery of RDF to Xcel's combustion units. In other words, the R&E Board plans to largely maintain the current system of processing waste and delivering it to Xcel for renewable electricity generation much as it has since the late 1980s. That said, the R&E Board's purchase of the R&E Center provided certainty that it would remain an RDF processing facility to support this intermediate continued use of the system.

The R&E Board, however, ultimately purchased the R&E Center and is pursuing the designation of waste to that R&E Center specifically so that it has greater control over the system and that waste gets put to its highest and best use. Reducing GHGs and other environmental and public health concerns are important considerations in the decisions made. Prior to purchasing the R&E Center, the R&E Board conducted analyses on the GHG implications of various future decisions it will consider as part of its longer term vision. The research was a comparative analysis of various waste management decisions that could be applied to the assumed 400,000 TPY of waste available for processing in the Counties. Alternative scenarios analyzed included:

1. the base case, which processes all of the RDF for electricity generation at Xcel's combustion units,
2. adding increased source separated organics ("SSO") and recycling ("SSR") capabilities with the remaining waste being combusted by Xcel,
3. adding MWP at the R&E Center in addition to enhanced SSO and SSR and sending the separated organics offsite to an Anaerobic Digester ("AD"),
4. combining 2 and 3 above with gasification of the remaining RDF instead of combustion,
5. processing the full 400,000 TPY for gasification only,
6. utilizing the current system, which includes some amount of landfilling, and
7. adding MWP and AD without SSO and SSR.

In each case the models considered mature systems and looked at GHG impacts associated with collection and hauling, transportation, and materials management (e.g., RDF processing, combustion and disposal), as well as any RDF combustion plant shut down, ethanol offset, or electrical offset associated with the particular scenario. The results showed that adding SSO and SSR would result in system reductions in GHG of about 52 percent whereas adding MWP and AD alone, the reductions would be almost 80 percent. By adding gasification to the processing only system (Alternative 2 in the table below), GHG emissions would become negative (or a GHG credit) with GHG emissions reduction of 225 percent when compared to the base case. If a gasification system is added along with the other processing technologies (Phase 3 in the table below), the reduction in GHG emissions would become 282 percent compared to the base case. Thus a R&E Board decision to add MWP and AD would certainly improve the overall GHG profile, but a decision to shift from combustion to gasification would have even more positive GHG implications.

**Table ES-1**  
**GHG Emissions Summary (MtCO<sub>2</sub>e)**

	Processing Only (Base Case)	Phase 1 - SSO/SSR	Alternative 1 - Processing, AD, and MWP	Phase 2 - SSO/SSR/MWP/AD	Alternative 2 - Processing and Gasification Only	Phase 3 - Gasification/SSO/SSR/MWP/AD	Existing System - Extended
Collection	13,502	14,684	13,502	14,684	13,502	14,684	13,502
Transportation	9,384	8,770	8,771	8,419	5,414	5,114	11,342
RDF Processing	5,393	4,969	9,048	8,957	5,393	8,957	4,341
Material Management							
• Recycling	(32,190)	(58,813)	(71,550)	(76,937)	(32,190)	(76,937)	(25,910)
• Anaerobic Digestion (AD)	0	(4,934)	(10,060)	(11,044)	0	(11,044)	0
• RDF Combustion	72,198	65,860	60,714	58,909	0	0	58,119
• Gasification	0	0	0	0	61,075	48,343	0
• Landfill	5,372	5,057	4,871	4,828	5,372	4,828	15,244
Material Management Subtotal	45,380	7,170	(16,024)	(24,244)	34,257	(34,810)	47,454
RDF Combustion Plant Shut-down	0	0	0	0	(170,538)	(141,967)	0
Ethanol Offset	0	0	0	0	(80,523)	(69,967)	0
Electrical Offset	0	0	0	0	100,641	83,780	0
<b>Total GHG</b>	<b>73,659</b>	<b>35,592</b>	<b>15,296</b>	<b>7,816</b>	<b>(91,855)</b>	<b>(134,229)</b>	<b>76,636</b>

6. Coordination of Solid Waste Management Among Political Subdivisions

The Counties have been coordinating solid waste management largely through the use of the R&E Center since the 1980s. Today this coordination is facilitated in much greater detail through the JPA, operation of the R&E Center and the Joint Designation Plan. Each County has approved the Designation Plan and will be implementing a corresponding ordinance to ensure that waste generated in the Counties is brought to the R&E Center by haulers that do not have Waste Delivery Agreements with the R&E Board. Successful utilization of existing resource recovery facilities is a stated goal of the Policy Plan, and the R&E Board’s coordination and successful operation of the R&E Center serves the stated goals of the Policy Plan as well as state statutes that prioritize use of resource recovery.

The Counties are members of the Solid Waste Management Coordinating Board (“SWMCB”), which, by definition, coordinates various waste management functions. The SWMCB provides a forum for coordination among metropolitan counties, and has facilitated, for example, coordination of county roles in the implementation of the restriction on disposal found in Minn. Stat. § 473.848.

The R&E Board is also working with the counties of Blue Earth, Nicollet, Sibley and LeSueur. Waste from those counties is processed at the R&E Center, taking advantage of the back-haul opportunity using RDF trailers delivering to the Xcel R&E Center in Mankato.

Additionally the Counties will continue to collaborate on additional waste management initiatives like the R&E Board’s BizRecycling program. The Counties have only strengthened their long-standing relationship on solid waste management coordination through the revised JPA and acquisition of the R&E Center. Waste designation in the Counties would serve to increase the ability of the Counties to work together to put the waste resources to their highest and best use.

7. Orderly and Deliberate Development and Financial Security of Waste Facilities

The Counties have long invested in a regional solid waste management system that focuses on strategic use of the R&E Center. Use of the R&E Center for resource recovery of waste that is not source

separated or recycled is consistent with local and state policies. The R&E Center, however, has been run by private entities since it was built in the 1980s. The R&E Board's purchase of the R&E Center option at the end of 2015 signifies the R&E Center's importance to the Counties' waste management plans into the future. It also marks a departure from a system overly reliant on continued subsidy to support private operation and toward one that is owned and operated by a public entity that can prioritize environmental and public health outcomes in addition to efficient financial operation.

Waste designation allows the R&E Board to plan on a predictable and more certain volume of waste to the R&E Center, which helps the R&E Board set the tipping fees at an appropriate level to ensure the long-term financial viability of the R&E Center. This, for example, may include investments in MWP that will be capital intensive but that will also lead to great amounts of resources recovered from waste and the ability to oversee a more flexible system that could respond to new market development for products that could not previously be recycled, reused or sold, or to changes to improve the overall economics as the waste composition profile changes. Ultimately, waste designation will assist the R&E Board to make and implement long-range plans to extract the most public health, environmental and societal benefits from waste management.

Waste designation reduces the risk of uncertain waste supply and the financial implications that accompany it, such as reduced tipping fees and a reduced volume of marketable products extracted from the waste stream. Further, under the JPA, each County is responsible for its percentage of any shortfall. Designation will greatly reduce the risk to each County of having to fund contributions due to inadequate waste supply.

## **B. Estimated Revenues and Expenses**

### **1. Financial Information**

#### **a. *Direct Costs: Operating***

The R&E Center is more akin to a manufacturing facility rather than a disposal facility, and has a number of key components that drive operating costs, including labor, maintenance, utilities, insurance, marketing costs, and transportation. A number of factors influence the operating costs and revenues at the R&E Center.

Two tables are presented below which show estimated operating costs and revenues for two scenarios. Both tables provide estimates based on 2016 budgeted operating costs, and extend in five year increments to year 2040. For both scenarios the waste delivery volume presented for financial analysis is 400,000 tons, which is a targeted budgeting number. Actual waste deliveries from Ramsey and Washington Counties, and other counties, will affect those delivery numbers. Note that the R&E Board has a \$10 million operating reserve fund created to maintain facility operations, to cover any debt obligations, and to address uninsured losses. When the fund is drawn upon, the policy of the R&E Board is to replenish the fund over time.

The first scenario includes cost estimates for operations at the R&E Center continuing as it has been operating, with no additional technology added and continuing to recover ferrous and nonferrous metals for recycling, and producing and delivering RDF to Xcel's two power plants. This scenario does not implement the vision of the R&E Board, but is used to provide a baseline of costs and revenues

based on the current system. Annual cost of operations in this scenario is projected to be \$26.4 million in 2016 to \$50.8 million in 2040; with cost per ton ranging from \$70.00 to \$133.55. That is a 2.8% increase per year over a 24 year period. In this scenario the major source of revenue is tipping fees. Revenue from the sale of recyclables is used to provide maintenance at the facility and to maintain a balance of \$2.5 million in an equipment maintenance fund. Transportation continues to be a major expense, as does the fuel supply agreement with Xcel Energy.

The second scenario estimates costs with the addition of MWP, and marketing of the organics to either anaerobic digestion or composting, and RDF to gasification. This scenario is based on addition of significant MWP technology, as well as hand-picking lines for recyclables, with a significant labor component. These estimates were first developed in 2015 during the R&E Board's evaluation of the system, and were developed to outline costs with a high-end MWP system. During 2016-2017 the R&E Board is in the process of analyzing MWP technologies and options, and will be preparing an actual design for MWP, followed by potential procurement and installation in 2019. The estimates in the scenario presented represent a high-end cost estimate for addition and operation of MWP. Actual costs may be lower if, for example, hand picking is not included in the MWP system, which would reduce labor costs significantly. As with the previous scenario, tipping fees are the major revenue component, but this scenario also includes a revenue share component from sales of biofuels produced by gasification. Annual cost of operations in this scenario differ in that transportation costs are reduced, the fuel supply costs to Xcel are reduced in time, and items such as insurance, utilities and maintenance are increased.

b. *Direct Costs: Capital*

Capital costs are depicted in the two scenarios. Debt service for purchase of the R&E Center, with a price of \$24.4 million, is paid by the R&E Board to Ramsey and Washington Counties for their respective share of the purchase price. An annual capital expense occurs to pay for capitalized maintenance and replacement of equipment. An Equipment Maintenance Fund exists to fund ongoing capital improvements with the need to issue debt. In the second scenario, a capital expense of \$22.4 million is projected for addition of MWP and other R&E Center improvements.



Scenario 1: R&E Center Cost Estimates Assuming Operations Continue as in the Past; 2016 - 2040							
		2016	2020	2025	2030	2035	2040
Tipping Fee - per ton		\$70.00	\$77.75	\$88.49	\$101.33	\$116.23	\$133.55
Annual Waste Delivery-Tons		385,000	400,000	400,000	400,000	400,000	400,000
Tipping Fees		\$ 26,950,000	\$ 31,100,000	\$ 35,396,000	\$ 40,532,000	\$ 46,492,000	\$ 53,420,000
Recovered Recyclables Revenue		\$ 700,000	\$ 818,901	\$ 996,318	\$ 1,212,173	\$ 1,474,794	\$ 1,794,312
<b>Total Operating Revenues</b>		<b>\$27,650,000</b>	<b>\$31,918,901</b>	<b>\$36,392,318</b>	<b>\$41,744,173</b>	<b>\$47,966,794</b>	<b>\$55,214,312</b>
<b>Labor</b>							
Plant Operations		\$ 6,121,369	\$ 7,161,136	\$ 8,712,617	\$ 10,600,231	\$ 12,896,802	\$ 15,690,932
Mgmt & Admin		\$ 1,145,370	\$ 1,239,785	\$ 1,368,823	\$ 1,511,291	\$ 1,668,587	\$ 1,842,255
Professional Services		\$ 176,500	\$ 108,243	\$ 119,509	\$ 131,948	\$ 145,681	\$ 160,844
Operating Supplies & Services		\$ 529,793	\$ 584,792	\$ 661,638	\$ 748,583	\$ 846,953	\$ 958,250
Building & Site Maintenance		\$ 230,441	\$ 254,364	\$ 287,790	\$ 325,608	\$ 368,396	\$ 416,806
Fixed Equipment Maintenance		\$ 1,912,596	\$ 2,111,148	\$ 2,388,570	\$ 2,702,448	\$ 3,057,572	\$ 3,459,362
Mobile Equipment Maintenance		\$ 1,293,902	\$ 938,241	\$ 1,061,534	\$ 1,201,028	\$ 1,358,853	\$ 1,537,417
Utilities		\$ 874,434	\$ 965,212	\$ 1,092,049	\$ 1,235,553	\$ 1,397,915	\$ 1,581,613
Insurance		\$ 549,970	\$ 631,103	\$ 749,552	\$ 890,233	\$ 1,057,318	\$ 1,255,762
Disposal -landfill charges		\$ 1,943,538	\$ 2,187,898	\$ 2,415,616	\$ 2,667,035	\$ 2,944,622	\$ 3,251,101
Transportation						\$ -	\$ -
Delivery to Power Generators		\$ 3,492,429	\$ 4,009,188	\$ 4,536,028	\$ 5,132,099	\$ 5,806,499	\$ 6,569,521
Delivery to Landfills		\$ 646,708	\$ 742,398	\$ 839,955	\$ 950,332	\$ 1,075,213	\$ 1,216,505
Delivery from Transfer Station		\$ 858,396	\$ 627,109	\$ 709,516	\$ 802,752	\$ 908,240	\$ 1,027,590
Transload Fees		\$ 1,210,800	\$ 855,918	\$ 968,393	\$ 1,095,648	\$ 1,239,625	\$ 1,402,522
Fuel Supply Agreement		\$ 5,028,254	\$ 5,977,368	\$ 6,762,843	\$ 7,651,536	\$ 8,657,011	\$ 9,794,613
Payment in Lieu of Taxes		\$ 386,000	\$ 417,819	\$ 461,306	\$ 509,319	\$ 562,329	\$ 620,857
<b>Total Operating Expenses</b>		<b>\$26,400,500</b>	<b>\$28,811,722</b>	<b>\$33,135,739</b>	<b>\$38,155,644</b>	<b>\$43,991,616</b>	<b>\$50,785,950</b>
<b>Debt Service -Ramsey County Bonds</b>							
Debt Service -Washington County		\$ 84,623	\$ 368,729	\$ 368,729	\$ 368,729	\$ 368,729	\$ 368,729
Capital Projects		\$ -	\$ 768,500	\$ 870,000	\$ 985,000	\$ 1,110,000	\$ 1,250,000
Transfer to Equipment Maintenance Fund			\$ 818,901	\$ 996,675	\$ 1,213,975	\$ 1,476,949	\$ 1,792,977
Transition Operator		\$ 1,100,000	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Non Operating Expenses</b>		<b>\$ 1,512,000</b>	<b>\$ 2,978,630</b>	<b>\$ 3,256,579</b>	<b>\$ 3,588,529</b>	<b>\$ 3,975,178</b>	<b>\$ 4,428,362</b>
<b>Net Income (loss)</b>		<b>\$ (262,500)</b>	<b>\$ 128,549</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Operating Reserve		10,000,000 \$ 9,737,500	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000
Equipment Maintenance Fund		0 \$ -	\$ 2,363,426	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000

Scenario 2: R&E Center Cost Estimates with Addition of Mixed Waste Processing; marketing of the Organics to Anaerobic Digestion or Composting and RDF to Gasification; 2016 - 2040							
		2016	2020	2025	2030	2035	2040
Tipping Fee - per ton		\$70.00	\$98.12	\$91.58	\$104.37	\$118.83	\$131.35
Annual Waste Delivery -Tons		385,000	400,000	400,000	400,000	400,000	400,000
<hr/>							
Tipping Fees		\$ 26,950,000	\$ 39,248,000	\$ 36,632,000	\$ 41,748,000	\$ 47,532,000	\$ 52,540,000
Recovered Recyclables Revenue		\$ 700,000	\$ 818,901	\$ 996,318	\$ 1,212,174	\$ 1,474,794	\$ 1,794,312
Biofuel Revenue Share		\$ -	\$ -	\$ 5,216,112	\$ 5,216,112	\$ 5,216,112	\$ 5,216,112
<b>Total Operating Revenues</b>		<b>\$ 27,650,000</b>	<b>\$ 40,066,901</b>	<b>\$ 42,844,430</b>	<b>\$ 48,176,286</b>	<b>\$ 54,222,906</b>	<b>\$ 59,550,424</b>
<hr/>							
Labor							
Plant Operations		\$ 6,121,369	\$ 6,756,846	\$ 7,644,751	\$ 8,649,334	\$ 9,785,928	\$ 11,071,879
Mgmt & Admin		\$ 1,145,367	\$ 1,264,271	\$ 1,430,406	\$ 1,618,374	\$ 1,831,041	\$ 2,071,655
MWP Staff		\$ -	\$ 4,175,885	\$ 4,724,630	\$ 5,345,486	\$ 6,047,926	\$ 6,842,674
Professional Services		\$ 176,500	\$ 109,843	\$ 124,277	\$ 140,608	\$ 159,085	\$ 179,990
Operating Supplies & Services		\$ 529,793	\$ 584,792	\$ 661,639	\$ 748,584	\$ 846,954	\$ 958,250
Building & Site Maintenance		\$ 230,441	\$ 254,364	\$ 287,789	\$ 325,607	\$ 368,395	\$ 416,805
Fixed Equipment Maintenance		\$ 1,912,596	\$ 2,111,148	\$ 2,388,570	\$ 2,702,448	\$ 3,057,572	\$ 3,459,362
Mobile Equipment Maintenance		\$ 1,293,902	\$ 1,100,723	\$ 1,245,367	\$ 1,409,018	\$ 1,594,175	\$ 1,803,662
MWP Equipment Maintenance		\$ -	\$ 634,692	\$ 718,096	\$ 812,460	\$ 919,224	\$ 1,040,017
Utilities		\$ 874,434	\$ 1,275,498	\$ 1,443,109	\$ 1,632,745	\$ 1,847,302	\$ 2,090,052
Insurance		\$ 549,970	\$ 1,127,500	\$ 1,275,663	\$ 1,443,295	\$ 1,632,956	\$ 1,847,540
Disposal -landfill charges		\$ 1,943,538	\$ 2,059,574	\$ 2,330,218	\$ 2,636,428	\$ 2,982,877	\$ 3,374,851
Gasification		\$ -	\$ -	\$ 5,246,186	\$ 5,935,578	\$ 6,715,562	\$ 7,598,042
Recycling Organics -Composting or AD		\$ -	\$ 3,283,843	\$ 3,715,367	\$ 4,203,597	\$ 4,755,984	\$ 5,380,960
Transportation							
Delivery to Power Generators		\$ 3,492,429	\$ 3,166,685	\$ -	\$ -	\$ -	\$ -
Delivery to Gasification		\$ -	\$ -	\$ 1,097,651	\$ 1,241,891	\$ 1,405,086	\$ 1,589,726
Delivery to Landfills		\$ 646,708	\$ 663,047	\$ 750,177	\$ 848,757	\$ 960,290	\$ 1,086,480
Delivery from Transfer Station		\$ 858,396	\$ 627,109	\$ 709,517	\$ 802,753	\$ 908,242	\$ 1,027,592
Transload Fees		\$ 1,210,800	\$ 855,918	\$ 968,393	\$ 1,095,648	\$ 1,239,625	\$ 1,402,522
Fuel Supply Agreement		\$ 5,028,254	\$ 4,917,308	\$ -	\$ -	\$ -	\$ -
Payment in Lieu of Taxes		\$ 386,000	\$ 426,072	\$ 482,061	\$ 545,408	\$ 617,079	\$ 698,168
<b>Total Operating Expenses</b>		<b>\$ 26,400,497</b>	<b>\$ 35,395,118</b>	<b>\$ 37,243,867</b>	<b>\$ 42,138,019</b>	<b>\$ 47,675,303</b>	<b>\$ 53,940,227</b>
<hr/>							
Debt Service -Ramsey County Bonds		\$ 327,377	\$ 1,021,500	\$ 1,021,500	\$ 1,021,500	\$ 1,021,500	\$ 1,021,500
Debt Service -Washington County		\$ 84,623	\$ 368,730	\$ 368,730	\$ 368,730	\$ 368,730	\$ 368,730
Debt Service- MWP Bonds		\$ -	\$ 1,537,523	\$ 1,537,523	\$ 1,537,523	\$ 1,537,523	\$ -
Capital Projects		\$ -	\$ 768,750	\$ 1,676,140	\$ 1,896,400	\$ 2,145,602	\$ 2,427,552
Transfer to Equipment Maintenance Fund		\$ -	\$ 819,321	\$ 996,670	\$ 1,214,114	\$ 1,474,248	\$ 1,792,415
Transition Operator		\$ 1,100,000	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Non Operating Expenses</b>		<b>\$ 1,512,000</b>	<b>\$ 4,515,824</b>	<b>\$ 5,600,563</b>	<b>\$ 6,038,267</b>	<b>\$ 6,547,603</b>	<b>\$ 5,610,197</b>
<hr/>							
<b>Net Income (loss)</b>		<b>\$ (262,497)</b>	<b>\$ 155,959</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>
<hr/>							
Operating Reserve	10,000,000	\$ 9,737,503	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000
Equipment Maintenance Fund	0	\$ -	\$ 2,363,425	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000

## 2. Indirect Costs

### a. *Enforcement*

The Counties have existing designation ordinances that have long been in place but have not recently been enforced. Because the ordinances are now roughly three decades old, the Counties are electing to proceed forward to amend these ordinances to update definitions, responsibilities and logistics included therein to more accurately accommodate the new system under public ownership and operation.

Each County will ultimately adopt very similar designation ordinances to reduce the potential for confusion among haulers and generators. For those haulers that do not enter into agreements with the Board and that are subject to the ordinances, the Counties will enforce the designation ordinances against violators. The Counties have a long history of assuring compliance with various ordinances, and have an array of enforcement mechanisms available to them. The ordinances to be put in place by each County will adhere closely to the guidance on penalties for violations included in Minn. Stat. § 115A.86, subd. 6. The civil penalties expressly allowed by statute and payable to the counties for violations may not exceed \$10,000/per day of violation plus mitigation damages and attorney and legal fees.

The Counties hope that the costs of enforcement are kept relatively low through successful contract negotiations, thereby minimizing the number of parties subject to possible enforcement actions under the ordinances. That said, some haulers may elect to be governed by the ordinance. If the Counties suspect violations, they will expend resources to investigate and be prepared to take appropriate enforcement actions.

The Board will also make every effort to enter into long-term waste delivery agreements with licensed haulers so that the obligations are clear and set forth in enforceable contracts. The Board will be responsible for enforcing its contracts.

### b. *Route Rearrangement*

The waste management system in the Counties is currently designed to deliver waste to the R&E Center. It involves a network of approximately 100 haulers and several private transfer stations where waste is consolidated and delivered to the R&E Center. Many of the haulers currently have Waste Delivery Agreements with the R&E Board. Under the ordinances, Acceptable Waste generated in each County will be required to be delivered, or cause to be delivered, to the R&E Center. Plans for designation build on this system and, in theory, should not involve significant route rearrangements for parties that are currently complying with their contractual arrangements, as well as state and local policies.

Nevertheless, approximately 100,000 TPY of Acceptable Waste is transported to in-state and out-of-state landfills. As the MPCA increases enforcement actions under Minn. Stat. § 473.848 for Minnesota landfills accepting unprocessed waste, perhaps that will redirect some Acceptable Waste to the R&E Center independent of the Counties' waste designation ordinances. It could, however, result in increased delivery of waste to landfills in neighboring states. Waste designation will affect haulers delivering Ramsey/Washington Acceptable Waste to landfills. These changes could result in route adjustments for the affected haulers, in some cases potentially shortening the travel distances for those that were previously hauling out-of-county or out-of-state.

Over the longer term and consistent with the Joint Designation Plan, the Counties could expand designation to other Solid Wastes as allowable under state law (e.g., industrial waste or construction and demolition waste). Because very little of this waste is currently being delivered to the R&E Center, this could involve future changes to hauler routes. Expanding designation this way however, would also necessitate development of an additional ordinance amendment at that time that would be subject to MPCA review and approval as well as the Counties own adoption process.

c. *Effects on Landfills*

Waste designation will have impacts on landfills that are currently taking Acceptable Waste from the Counties. For the tonnage sent to Minnesota landfills, designation would be supporting State policies, such as like Minn. Stat. § 473.848, that already compel the redirection of this waste to the R&E Center. Designation would also affect the tonnage being sent to the out-of-state landfills, the vast majority of which is going to the Seven Mile Creek landfill near Eau Claire, Wisconsin. The Board estimates that designation may reduce the tonnage being delivered to the Seven Mile Creek landfill by roughly 30,000 TPY.

d. *Competition*

Without designation, economic interests continue to drive waste delivery to lower-priced surrounding in-state and out-of-state landfills. These landfills, however, have varying degrees of capacity and may be subject to other county plans or other states' waste management policies over time. This could include anything from lower environmental requirements, to complications in relicensing or expanding to meet future needs to a change in policy as to the acceptance of out-of-county or out-of-state waste.

Under designation, the competitive field is evened for disposal location and costs, allowing waste haulers the opportunity to compete based on collection service. In this way designation enhances competition by keeping costs of entry to the system low and providing a broader number of haulers the opportunity to compete.

It is ultimately beneficial to the generators of waste to have greater certainty over the management and disposal of the generated waste. Designation supports the long-term viability of the R&E Center and thereby keeps the primary waste disposal mechanism for County residents and businesses viable and ultimately accountable to those residents. Furthermore, designation to this particular R&E Center provides even greater certainty that there will be long-term solutions for County-generated waste. Further there are no other resource recovery options in the East Metro and thus the Counties will be designating to the only RDF facility existing and in operation in the East Metro.

The fact that the R&E Center is a waste processing R&E Center gives it the opportunity to process waste in a way that responds to other market changes and continues to secure the highest and best uses for the processed materials. Designation to the R&E Center should secure for County residents and businesses a more certain long-term solution for the waste they generate.

e. *Transfer Stations*

There is a broad system of existing privately-held transfer stations in the greater Twin Cities metropolitan region that support waste management in the East Metro. The R&E Board currently

contracts with seven of these transfer stations to receive and manage waste deliveries; weigh and track deliveries by hauler; and transfer waste from the hauler trucks to the larger transload trucks or trailers that eventually deliver to the R&E Center. This helps reduce management and accounting of waste at the R&E Center. The use of these transfer stations also helps reduce GHG emissions by reducing the distance haulers travel to deliver waste and then aggregating that waste into much larger loads that are transported to the R&E Center (roughly three times the size of a single hauler truck). It also helps relieve delivery congestion at the R&E Center and helps the R&E Center manage waste flows so as to maximize efficiency. This, in turn, also helps reduce drive and wait time for haulers.

The R&E Board has already attempted to minimize disruption to this system of transfer stations by continuing to contract with various transfer stations to provide these services in support of the R&E Center. Under designation, only the R&E Center will be a designated point of final delivery. All generators and haulers subject to designation (not under contract with the R&E Board) will be required by ordinance to deliver, or cause to be delivered, all Acceptable Waste to the R&E Center. Those that enter into contracts with the R&E Board, will be exempt from the designation ordinance. Whether by ordinance or by contract, the R&E Board will carefully evaluate options available to it to allow continued use of the transfer stations by haulers delivering to the R&E Center.

f. *Other Long-Term Effects*

Over the long term, designation should be beneficial to the haulers. It provides a reliable, long-term waste management method for all haulers. It will also provide a more even playing among all haulers including those that also own disposal sites of their own.

Once the haulers adjust their routes, if necessary, there should be little additional incurred costs due to designation. As mentioned elsewhere, designation of waste to the R&E Center should have relatively minimal effect on transportation costs for waste disposal in the Counties in light of the R&E Center's central role in the current system of waste deliveries.

Furthermore designation to the R&E Center relieves the Counties from the considerable liability and long-term management considerations associated with landfills and that the Counties witnessed first-hand a few decades ago. It also relieves the Counties, and its residents, from a system dependent on inefficient financial support of waste processing by private parties. The Counties' direct ownership and operation of the R&E Center should allow the true costs of waste management to be borne by residents inclusive of the costs associated with important public health and environmental goals.

**C. Designation Is Necessary for the Financial Support of the R&E Center**

Designation is crucial to securing sufficient waste supply to support the reliable operation of and long-term financial viability of the R&E Center as well as future endeavors the R&E Board undertakes to further make advances in waste management. Other waste assurance methods involve reliance on multiple factors that may be outside the respective County's control, be more costly to implement, or be less effective in securing adequate waste. Without the certainty that waste designation provides, the Counties' investments in acquiring the R&E Center in particular would be put substantially at risk and the overall waste management plans relying on use of the R&E Center would also be in jeopardy. Loss of the R&E Center as a central component of each County's solid waste management plan would mean a substantial return to landfilling and the associated increased risks to human health and the

environment, reduced recycling and loss of renewable electricity generation; and a return to waste management activities that fall lower on the State's hierarchy.

## **V. Evaluation of Alternatives to Designation**

### **A. Background**

Any evaluation of the alternatives to designation must begin by noting that the Counties are in the unique position of owning an existing solid waste processing R&E Center that largely supports a long-standing waste management system in the Counties. Further, the Counties each initially relied on waste designation until federal court decisions caused a cessation in designation ordinance enforcement. The Counties have since been significant market participants by contracting with haulers and transfer stations to economically incent delivery of waste to the R&E Center. Thus alternatives the Counties faced at the time of the acquisition were:

- (1) to continue to subsidize private operation of the R&E Center and forgo certainty and control over the R&E Center's long-term use,
- (2) to pass on the purchase and unfavorable contract terms and risk the loss of the R&E Center as a central component to the Counties' waste management system, or
- (3) to acquire the existing R&E Center and implement short- and long-term plans for waste management.

The R&E Board elected to pursue the third option as the most certain way to continue the successful system already in place, take control of the costs of operation, reduce the reliance on excessive subsidies, and make substantial progress in its vision for waste management into the future. Thus an evaluation of alternatives to designation must account for the R&E Board's ability to assure an adequate waste supply at the R&E Center at a reasonable cost to the Counties and its residents, but also provide the R&E Board the best opportunity to:

- (1) pursue the goals of the Counties' Master Plans,
- (2) move waste up the State's waste management hierarchy,
- (3) efficiently and economically manage solid waste in the Counties, and
- (4) realize the R&E Board's long-term vision and goals for waste management in the Counties.

### **B. Availability of Less Restrictive Methods for Ensuring Adequate Waste Supply**

While designation is one approach, there are other options that the R&E Board and Counties have considered.

1. Relying on Negotiated Contracts

For the majority of the last two decades, the R&E Board incentivized sufficient MSW for the R&E Center through the use of hauler contracts. However, for a period of time, the Counties utilized waste designation which, as discussed more below, was very successful.

a. *Initial Reliance on Designation*

Under the initial 20-year Service Agreement with Xcel that terminated at the end of 2006, the Counties were obligated to assure delivery to the R&E Center of a minimum of 280,000 tons of Acceptable Waste per year. The R&E Center was initially owned and operated by Xcel, and ownership was subsequently transferred to its wholly-owned subsidiary, NRG, which then became the independent company NRG Energy, Inc. ("NRG"). NRG continued to own and operate the R&E Center until it was acquired by RRT at the end of 2006.

For a period while the R&E Center was owned and operated by Xcel, the Counties relied on waste designation ordinances adopted pursuant to Minnesota's Waste Designation Statute for delivery of all Acceptable Waste generated within the two Counties to the R&E Center. Under designation, the Counties were able to secure all Acceptable Waste. However, after both Counties ceased enforcing their designation ordinances and moved to a waste delivery assurance system involving delivery agreements with haulers licensed and operating within the Counties, the amount of waste secured under the delivery agreements was less than under designation.

There were two types of delivery agreements: "all waste" and "specific tonnage." Under the all-waste type, haulers agreed to deliver all of the waste they collected within the Counties to the R&E Center at a subsidized tipping fee. Under the specific-tonnage agreement, haulers delivered a set amount, but not all, of the waste collected in the Counties. The Counties initially subsidized the tipping fee by utilizing a waste management service charge, imposed pursuant to Minn. Stat. §§ 473.811 and 400.08, collected via property tax statements. Proceeds from the charge were used to reduce the tipping fee from the actual cost paid to Xcel/NRG to an amount negotiated with the haulers, with such amounts being similar to the cost of transporting and disposing of the waste at landfills.

In 2001, certain haulers began either renegeing on their contractual agreements or threatening to refuse to sign new delivery agreements unless the amount of the subsidy (and corresponding service charge) was further increased. The Counties then conducted a lengthy and thorough investigation into the potential for establishing a public collection system in the Counties under which the Counties would contract on behalf of residential and non-residential waste generators for the collection of MSW with one or more haulers with the contract specifying delivery of the waste to the R&E Center.

The Counties ultimately chose not to establish the public collection approach but instead implemented the hauler-collected service charge that had been recently upheld by the Minnesota Supreme Court in *Zenith/Kremer v. Western Lake Superior Sanitary District*, 572 N.W.2d 300 (Minn. 1997). As part of the Counties' decision not to pursue public collection, the haulers also agreed to a reduced subsidy arrangement, longer term waste delivery agreements, and a shift to a hauler-collected service charge ("County Environmental Charge" or "CEC").

b. *RRT Acquires the R&E Center and Takes over Negotiated Contracts*

When RRT acquired the R&E Center from NRG in 2007, RRT took over responsibility to contract with haulers for waste delivery. A Solid Waste Processing Agreement was executed between RRT and the Counties that required RRT to accept a minimum tonnage of waste from the Counties (275,000 TPY). In the renewal term in 2013 through 2015, the amount was raised to 300,000 TPY of waste from the Counties. In the initial agreement, the Counties committed to a processing payment to RRT for each ton of waste processed (ranging from \$10 to \$40 per ton over the term), as well as establishment of a hauler rebate program (ranging from \$12 to \$14 per ton over the term). In the second agreement, there was no processing payment, but a hauler rebate was paid for deliveries up to 300,000 TPY. This arrangement cost the Counties \$8.4 million annually between 2013 and 2015 (or \$25.2 million from 2013 to 2015).

To meet its minimum requirement, RRT contracted with the majority of the waste haulers in the Counties for delivery to the R&E Center of some or all of the waste the hauler collects. The contracts were in the form of either a new agreement or an amendment to a prior agreement. All of the contracts expired on December 31, 2015 (coterminous with the Solid Waste Processing Agreement and the Counties' acquisition of the R&E Center). In the final year of ownership by RRT (2015) the tipping fee under RRT's contracts with the haulers was set at \$86.22 per ton, with the ability for it to be modified based upon the price of diesel fuel or the Consumer Price Index. The agreements specifically cited the Board's hauler rebate program as benefitting the haulers.

c. *Current Contractual Approach Alone Is Not Sufficient*

Prior to acquiring the R&E Center, the R&E Board commissioned a report on solid waste delivery assurance that examined whether and how the R&E Board could assure sufficient deliveries of waste to the R&E Center through the use of regulatory approaches, such as designation, and economic incentive approaches, which included hauler delivery agreements, hauler rebates, and zero tip fees.

In the final months of 2015, the R&E Board began negotiating new waste delivery agreements with private haulers that collect waste in the Counties that would take effect January 1, 2016, the date the R&E Board began operating the R&E Center. These agreements come in three forms: (1) an "all waste agreement" wherein the hauler agrees to deliver to the R&E Center all of the waste it collected in the Counties; (2) a "specific tonnage agreement" wherein the hauler agrees to deliver to the R&E Center a set amount of the waste it collects in the Counties; and (3) an "out of county specific tonnage agreement" wherein the hauler agrees to deliver to the R&E Center a set amount of waste it collects outside of the Counties. In total, the R&E Board executed nearly 100 contracts with private haulers, including three firms that also own and operate landfills: Advanced Disposal, Republic Services, and Waste Management.

According to the R&E Board's extensive studies on the matter, the R&E Center needs to process at least 380,000 tons of MSW to meet its minimum delivery amount of 320,000 tons under the Fuel Supply Agreement with Xcel. If the R&E Board cannot meet its obligation to deliver 320,000 tons of RDF to Xcel in any given year, the R&E Board must pay Xcel \$15 per ton that the R&E Board fails to deliver. The downward trend in waste deliveries is even more important when one takes into account the fact that the Fuel Supply Agreement terminates at the end of 2017. Xcel and the R&E Board agreed by letter dated November 25, 2015 to negotiate a new agreement that would address RDF deliveries to Xcel for a number of years into the future.



Despite the R&E Board's efforts to work with haulers to execute negotiated contracts, the R&E Board was not able to contract sufficient waste to guarantee that it will receive the 380,000 tons it needs to satisfy its obligations under the Fuel Supply Agreement. Indeed, based on current projections, and depending on how much waste is delivered via the "all waste agreements," it is unclear whether the R&E Center will receive the minimum of 380,000 tons it needs. Even if it does, current projections for total waste delivered to the R&E Center show that this year's total will continue the decade-long downward trend in waste received at the R&E Center. Thus, the R&E Board, and RRT before it, attempted to utilize negotiated contracts only to find that they could not secure sufficient waste to meet the current contractual obligations to Xcel, let alone any potential expanded obligations in the future.

## 2. Publicly Owned Collection Service

In 2001 and 2002, the Counties conducted an in depth study on potential implementation of a public collection system in response to a shortage of waste deliveries at the R&E Center. As discussed above, the shortage was caused by the decisions made by the private haulers under contract with the Counties to deliver smaller amounts of waste to the R&E Center than required by the agreements and instead directing that waste to landfills.

The Counties' study examined the two options for implementing a publicly owned collection system. The first included the authority found in Minn. Stat. § 115A.94, the Organized Collection Statute. The second relied on authority granted in Minn. Stat. Ch. 145A, 400, and 473, which provided for a direct county approach. The Counties' study found that the advantages to a publicly owned collection system included the ability to design a system to meet the environmental, health, and safety goals of the State and Counties as well as those of the community, which included competition, choice, and service quality. Moreover, a public collection system could reduce local impacts on traffic and illegal dumping, stabilize the solid waste market, and offer opportunity to remove solid waste costs from property tax statements so that waste generators were more directly billed based on volume.

Regarding the disadvantages, the study found that, while there was ample evidence that public collection could be suitable in some instances for the collection of residential waste, there was little evidence that public collection was well suited for collection of commercial waste. Without some evidence as to the form and function of a public collection system for commercial waste, the Counties' decided to secure delivery of the optimum amount of waste by developing and implementing a hauler-collected waste management service charge and entering into long-term contracts with haulers. These changes addressed the Master Plan goals and provided the Counties with more certainty as to how they could assure sufficient waste deliveries to the R&E Center.

Many of the reasons the Counties did not pursue implementation of a publicly owned collection system as a response to the waste shortage in the early 2000's are the same as those that make such a system unsuitable as an alternative to designation. Whereas designation provides the R&E Board with certainty as to the receipt of both residential and commercial waste, public or organized collection is generally applied to residential waste only and there is very little practical experience involving its application to commercial waste. In addition to reaching more waste, designation should also be less disruptive to haulers in that it simply sets forth the requirement to deliver waste to the R&E Center but otherwise generally does not prescribe how or who must handle those deliveries. Thus, a public collection system

is not necessarily less restrictive than designation, nor as effective in securing sufficient waste at the R&E Center.

That said some of the cities in the two Counties do have organized collection of residential waste and/or recyclables. In addition, at least one, the City of Saint Paul, is considering a shift toward organized collection.

### 3. Closure of Landfills

Neither County owns or operates an MSW landfill nor are there existing landfills in the Counties that currently accept MSW. The landfills used by haulers that collect waste in the Counties are located in other counties and even other states. As a result, the Counties do not have the ability to close or order the closure of landfills in other jurisdictions.

### 4. Public Entity Waste

The Counties' Master Plans have identified the R&E Center as the preferred processing R&E Center, which has in turn obligated public entities within the Counties to utilize the R&E Center as their primary waste management option after exhausting recycling and other source-separated opportunities. As a result, all Acceptable Waste generated by public entities in the two Counties is being delivered to the R&E Center pursuant to Minn. Stat. § 115A.46, Subd. 5 ("Public Entity Statute"). Further, all Acceptable Waste collected by private haulers pursuant to municipal organized collection arrangements is also delivered to the R&E Center.

The R&E Board and Counties will continue to monitor public entity compliance and utilize the Public Entities Statute for future resource recovery efforts at the R&E Center. This is a waste delivery assurance method that has proven to work well, but it does not provide the volume of MSW needed to assure that the R&E Center runs at full capacity and the R&E Board can meet its contractual obligations. The R&E Board estimates that the public entity waste available in the Counties is between 50,000 and 90,000 TPY. Even at the higher estimate, the public entity waste would not even represent a quarter of that necessary to reach the 380,000 needed to adequately supply Xcel with RDF, much less the 400,000 ton total generated in the Counties.

### 5. Enforcement of Minn. Stat. § 473.848

In 2012, the Minnesota Legislature directed MPCA to prepare a report on how compliance with Minn. Stat. § 473.848, the Restriction on Landfill Disposal Statute, which precludes the delivery of unprocessed MSW in the Twin Cities metropolitan area to landfills, could be achieved. The MPCA report to the Legislature stated that the four Minnesota landfills receiving metropolitan waste were not in compliance with the restriction on disposal and proposed to amend landfill permits to restrict them from accepting unprocessed metropolitan MSW unless it has been certified as unprocessable. On June 26, 2013, MPCA informed the landfill owners and other interested parties by letter (the "MPCA Letter") that hundreds of thousands of tons of MSW have gone directly to landfills contrary to state law and that MPCA intended to implement the strategy it had outlined in its report to the Legislature to reverse this trend. The R&E Board has studied the possible effects of MPCA enforcement of Minn. Stat. § 473.848 and also closely followed the litigation related thereto.

Waste Management owns and operates three of the four landfills in Minnesota that had been receiving metropolitan MSW. In response to the MPCA Letter, Waste Management sought a declaratory order directing MPCA to cease its implementation of its strategy. In December 2013, the Administrative Law Judge (“ALJ”) issued an order denying Waste Management’s challenge. Waste Management appealed the ALJ’s decision to the Minnesota Court of Appeals, agreeing with the ALJ’s determination that the MPCA strategy was a rule, but contending that the ALJ erred in finding the MPCA strategy exempt from rulemaking. In part, Waste Management argued that the pre-disposal certification strategy was inconsistent with Minn. Stat. § 473.848 and thus was not exempt from rulemaking, and also that MPCA could not use the regional planning process under Minn. Stat. § 473.149 to circumvent rulemaking procedures.

On June 25, 2014, the Minnesota Court of Appeals heard the appeal and on August 11, 2014 filed its judgment affirming the ALJ’s decision. On September 10, 2014, Waste Management filed a petition with the Minnesota Supreme Court seeking review of the Minnesota Court of Appeals decision. The Minnesota Supreme Court denied Waste Management’s petition on October 28, 2014 and ended Waste Management’s attempt to halt the implementation of the MPCA plan.

Despite MPCA’s apparent success in developing a plan to enforce Minn. Stat. § 473.848, and notwithstanding any other legal challenges to the plan, the R&E Board’s analysis of the plan determined that the effect of enforcement on waste delivery assurance may be minimal because MPCA determined that it cannot enforce Minn. Stat. § 473.848 beyond the state’s borders without implicating dormant Commerce Clause issues. Of the approximately 100,000 TPY of Ramsey/Washington waste that are not processed at the R&E Center, roughly two-thirds are directly delivered to Minnesota landfills and the other third are delivered to out-of-state landfills. As mentioned above, MPCA cannot enforce its rules on out-of-state landfills and thus MPCA enforcement would not reach the waste already being disposed of out of state. Furthermore, MPCA enforcement could cause others to begin or return to delivering additional waste to landfills in the neighboring states of Iowa and Wisconsin instead of landfills located in-state or delivering to the R&E Center. As a result, MPCA enforcement of Minn. Stat. § 473.848 is not a satisfactory alternative to designation.

### **C. Summary of Alternatives to Designation**

The R&E Board has already attempted without success to secure through negotiated contracts sufficient waste to meet the goals of their Master Plans and contractual obligations. Repeated attempts to do so had also led to extensive subsidies being borne by the Counties to achieve something they can now achieve using waste designation as a regulatory “safety net,” while aiming to better serve the public interest and at lower cost.

If economic drivers were more closely correlated with the State’s waste hierarchy, designation may not be necessary. However, it remains the case that waste disposal methods that fall lower on the State’s hierarchy, such as regional landfills, continue to have lower fees than those at the R&E Center. Thus the Counties require designation to efficiently run and maximize the value of the R&E Center. To that end, the R&E Board is already examining ways in which designation will allow the incorporation of additional emerging waste processing technologies into the East Metro System. In order to finance and make these possibilities a reality, the R&E Board and Counties need the assistance of waste designation to ensure sufficient waste deliveries to the R&E Center at reasonable cost.

**VI. Conclusion**

Ramsey and Washington Counties through a joint powers board, the Ramsey/Washington Recycling & Energy Board, purchased the Recycling & Energy Center in Newport, Minnesota (“R&E Center”) on December 31, 2015. The counties plan to use the R&E Center as a key component in managing waste and resources in the East Metro area. During a three year planning and evaluation period, the counties anticipated the use of waste designation as a critical policy choice to achieve state waste management goals. The counties are updating their current solid waste master plans to reflect the purchase of the R&E Center and to provide more detail about the R&E Center’s operations. In addition, a Joint Waste Designation Plan has been developed and will be submitted to the MPCA for approval on behalf of both counties, as the necessary next step in achieving the vision for waste and resource management.

The current Master Plans supported a merchant approach for waste processing, in which the financial risk and benefit of owning and operating a waste processing facility would have rested with the private sector, and the counties would not have to continue to fund incentives to haulers to ensure delivery of waste to the R&E Center. The merchant approach failed, when the solid waste marketplace did not support a market-based approach. The master plan policies state that, in the event of a failure of the market to support a merchant facility, other actions would be considered, including possible purchase of the processing facility in Newport.

During 2013 to 2015, the R&E Board conducted an extensive evaluation of options and decided to purchase and publically operate the facility. The amendment to the Master Plan continues the counties’ support of waste processing, acknowledges the option selected to publicly own and operate the R&E Center, and adopts a policy that states their intent to implement designation as a policy tool to achieve environmental goals.