

# TRI-COUNTY COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

LE SUEUR, NICOLLET AND SIBLEY COUNTIES,  
MINNESOTA

*OCTOBER 2013*

**Solid Waste Management Plan  
2013**

**Tri-County Solid Waste Joint-Powers Board, Minnesota**

Adoption Date: \_\_\_\_\_

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# TABLE OF CONTENTS

<b>ACKNOWLEDGEMENT</b> .....	<b>i</b>
<b>TABLE OF CONTENTS</b> .....	<b>ii</b>
<b>LIST OF TABLES</b> .....	<b>vii</b>
<b>LIST OF FIGURES</b> .....	<b>x</b>
<b>ACRONYMS AND ABBREVIATIONS</b> .....	<b>xii</b>
<b>CHAPTER ONE - EXECUTIVE SUMMARY</b> .....	<b>1</b>
<b>1.1 BACKGROUND</b> .....	<b>1</b>
<i>1.1.1 Overview - Collaborative Solid Waste Planning and Management Framework</i> .....	3
<i>1.1.2 Stakeholders' Participation in the Plan Process</i> .....	3
<b>1.2 OVERVIEW OF CURRENT SOLID WASTE SYSTEM AND WASTE FLOW</b> .....	<b>3</b>
<b>1.3 RECOMMENDED PLAN FOR SOLID WASTE MANAGEMENT</b> .....	<b>5</b>
<b>1.4 CONTINGENCY SOLID WASTE MANAGEMENT SYSTEM</b> .....	<b>9</b>
<b>1.5 POLICY AREAS, GOALS, PROGRAMS AND BUDGET FOR SOLID WASTE ABATEMENT PROGRAMS FOR THE NEXT TEN YEARS</b> .....	<b>11</b>
<i>1.5.1 Budget</i> .....	22
<b>CHAPTER TWO – BACKGROUND INFORMATION OF COUNTIES</b> .....	<b>23</b>
<b>2.1 INTRODUCTION</b> .....	<b>23</b>
<b>2.2 GEOPHYSICAL CHARACTERISTICS OF COUNTIES</b> .....	<b>25</b>
<i>2.2.1 Counties' Location, Size and Transportation</i> .....	25
<i>2.2.2 Vegetation, Topography, and Hydrography of Counties</i> .....	29
<i>2.2.3 Land Use/Cover and Development Trends</i> .....	32
<b>2.3 DEMOGRAPHICS</b> .....	<b>37</b>
<i>2.3.1 Population and Household Characteristics of Counties</i> .....	37
<i>2.3.2 Population Distribution among Cities and Townships</i> .....	39
<i>2.3.3 Population Projections of Counties</i> .....	40
<b>2.4 LOCAL ECONOMIC CONDITION</b> .....	<b>41</b>
<i>2.4.1 Labor force outlook for the Tri-County</i> .....	41
<i>2.4.2 Employments, Wages and Incomes of Counties</i> .....	42

2.4.3 Housing Situation.....	43
<b>2.5 SUMMARY OF DEMOGRAPHIC, LAND USE AND ECONOMIC CONSTRAINTS AND OPPORTUNITIES.....</b>	<b>44</b>
<b>2.6. SOLID WASTE GENERATION AND MANAGEMENT .....</b>	<b>45</b>
2.6.1 Waste Generated.....	45
<b>2.7 SOLID WASTE COMPOSITION .....</b>	<b>46</b>
<b>2.8 WASTE COLLECTION AND DISPOSAL INFORMATION.....</b>	<b>50</b>
2.8.1 Current Collection and Disposal Rates .....	51
<b>2.9 SUMMARY AND REVIEW OF SOLID WASTE MANAGEMENT EFFORTS BY THE TRI-COUNTY</b>	<b>58</b>
2.9.1 Local and Regional Solid Waste Planning in the last 5 Years.....	58
2.9.2 Past Impediments/Barriers to the Development of Projects on a Regional Basis.....	60
2.9.3 Resolution Measures for Conflicting/Overlapping or Local Initiatives .....	61
<b>CHAPTER THREE – EXISTING AND PROPOSED INTEGRATED SOLID WASTE MANAGEMENT SYSTEM .....</b>	<b>62</b>
<b>3.1 INTRODUCTION .....</b>	<b>62</b>
<b>3.2 BACKGROUND/HISTORY OF EXISTING WASTE MANAGEMENT SYSTEM.....</b>	<b>62</b>
3.2.1 Summary of System Development History.....	64
<b>3.3 POLICY/GOALS FOR IMPROVEMENT UNDER THE EXISTING INTEGRATED SYSTEM .....</b>	<b>66</b>
<b>3.4 DESCRIPTION OF EXISTING WASTE FACILITIES IN USE.....</b>	<b>67</b>
3.4.1 Municipal Solid Waste Processing (RDF Production, MWPC and RRT RDF) .....	67
3.4.2 Description of Land Disposal Facilities In Use.....	86
3.4.3 Cost of Operating and Maintaining Tri-County’s Integrated Solid Waste Management System.	95
<b>3.5 SUMMARY OF ACHIEVEMENTS, OPPORTUNITIES AND CHALLENGES.....</b>	<b>96</b>
<b>3.6 PROPOSED INTEGRATED WASTE MANAGEMENT SYSTEM .....</b>	<b>98</b>
3.6.1 Alternatives to the Proposed Integrated Waste Management System.....	101
<b>3.7 BARRIERS TO ACHIEVING GREATER INDEPENDENCE FROM LAND DISPOSAL.....</b>	<b>103</b>
3.7.1 Reasons for the Continued Use of Land Disposal System .....	103

<b>CHAPTER FOUR – SOLID WASTE SYSTEM EVALUATION AND TEN YEAR IMPLEMENTATION PLAN .....</b>	<b>105</b>
<b>4.1 INTRODUCTION .....</b>	<b>105</b>
<b>4.2 SOLID WASTE REDUCTION PROGRAMS .....</b>	<b>105</b>
4.2.1 Existing Solid Waste Reduction Program .....	106
4.2.2 Solid Waste Reduction Programs to implement for the next 10 years .....	107
<b>4.3 SOLID WASTE EDUCATION PROGRAMS .....</b>	<b>108</b>
4.3.1 Existing Solid Waste Education Program .....	109
4.3.2 Solid Waste Education Programs to implement for the next 10 years .....	110
<b>4.4 RECYCLING PROGRAMS.....</b>	<b>110</b>
4.4.1 Existing Public and Private Sector Recycling Programs .....	111
4.4.2 Recycling Programs to Implement for the next 10 years .....	113
<b>4.5 YARD WASTE MANAGEMENT PROGRAMS.....</b>	<b>115</b>
4.5.1 Existing Public and Private Sector Yard Solid Waste Programs .....	115
4.5.2 YardWaste Management Programs to implement for the next 10 years.....	117
<b>4.6 SOURCE-SEPARATED ORGANIC MATERIALS (SSOM) COMPOSTING PROGRAMS.....</b>	<b>118</b>
4.6.1 Existing Collection System for Source-Separated Organic Materials.....	119
4.6.2 Source-Separated Organic Materials Programs to implement for the next 10 years.....	120
<b>4.7 SOLID WASTE RESOURCE RECOVERY .....</b>	<b>121</b>
4.7.1 Existing RDF Programs.....	121
4.7.2 MSW Solid Waste Incineration and Resource Recovery Programs to Implement over the next 10 years. ....	122
<b>4.8 MSW LAND DISPOSAL FACILITIES.....</b>	<b>123</b>
4.8.1 Description of Existing Facilities.....	123
4.8.2 MSW Land Disposal Programs to Implement for the next 10 years.....	124
<b>4.9 WASTE TIRE MANAGEMENT PROGRAMS .....</b>	<b>124</b>
4.9.1 Existing Public/Private Sector Waste Tire Management.....	125
4.9.2 Waste Tire Management Programs to implement over the next 10 years .....	126
<b>4.10 ELECTRONIC PRODUCTS PROGRAMS.....</b>	<b>127</b>
4.10.1 Existing Programs.....	127
4.10.2 Electronic Products Programs to Implement for the next 10 years Programs: .....	128

<b>4.11 MAJOR APPLIANCE MANAGEMENT .....</b>	<b>129</b>
<i>4.11.1 Existing Programs.....</i>	<i>129</i>
<i>4.11.2 Major Appliance Programs to Implement for the next 10 years Programs: .....</i>	<i>130</i>
<b>4.12 AUTOMOTIVE MERCURY SWITCHES, MOTOR VEHICLE FLUIDS AND FILTERS, AND LEAD-ACID AND DRY CELL BATTERIES .....</b>	<b>131</b>
<i>4.12.1 Existing Programs.....</i>	<i>132</i>
<i>4.12.2 Programs to implement for the next 10 years .....</i>	<i>133</i>
<b>4.13 HOUSEHOLD HAZARDOUS WASTE (HHW) .....</b>	<b>134</b>
<i>4.13.1 Existing Facility and Programs .....</i>	<i>135</i>
<i>4.13.2 Household Hazardous Solid Waste Programs to Implement for the next 10 years .....</i>	<i>138</i>
<b>4.14 DEMOLITION DEBRIS MANAGEMENT .....</b>	<b>139</b>
<i>4.14.1 Existing Programs.....</i>	<i>139</i>
<i>4.14.2 Demolition Debris Management Programs to Implement for the next 10 years .....</i>	<i>140</i>
<b>4.15 ON-SITE AND ILLEGAL DISPOSAL .....</b>	<b>141</b>
<i>4.15.1 Existing Programs.....</i>	<i>141</i>
<i>4.15.2 On-site and Illegal Disposal Management Programs to Implement for the next 10 years .....</i>	<i>142</i>
<b>4.16 SUMMARY OF PLAN EVALUATION AND IMPLEMENTATION .....</b>	<b>143</b>
<b>CHAPTER FIVE – FRAMEWORK FOR PLAN IMPLEMENTATION, REVIEW, MONITORING AND EVALUATION.....</b>	<b>145</b>
<b>5.1 INTRODUCTION .....</b>	<b>145</b>
<b>5.2 TRI- COUNTY SOLID WASTE ORDINANCE.....</b>	<b>145</b>
<b>5.3 CURRENT PROBLEMS WITH ORDINANCE ENFORCEMENT .....</b>	<b>146</b>
<i>5.3.1 Plans to Develop or Amend Ordinances.....</i>	<i>147</i>
<b>5.4 MITIGATION EFFORTS OF ENVIRONMENTAL AND PUBLIC HEALTH IMPACTS.....</b>	<b>148</b>
<i>5.4.1 On-Site Disposal of MSW by Farms or Households.....</i>	<i>148</i>
<i>5.4.2 Illegal Disposal.....</i>	<i>149</i>
<i>5.4.3 Alternatives to the Proposed Integrated Solid Waste System .....</i>	<i>149</i>
<b>5.5 MULTI-COUNTY PLANNING AND PUBLIC PARTICIPATION PROGRAM.....</b>	<b>150</b>
<i>5.5.1 Documentation Location.....</i>	<i>150</i>
<b>5.6 REVIEW PROCESS AND TIMELINES – DOCUMENTATION OF THE ONGOING PROCESS.....</b>	<b>151</b>

5.6.1 Solid Waste Staffing/Advisory Member..... 152

**APPENDICES.....153**

*APPENDIX 1: GOAL-VOLUME TABLES ..... 153*

*APPENDIX 2: DETAILED BUDGET OUTLINE FOR THE 10-YEAR PLAN PERIOD ..... 161*

*APPENDIX 3: DEFINITION OF KEY TERMS..... 165*

*APPENDIX 4: PLAN ADOPTION RESOLUTION..... 173*

*APPENDIX 5: SOLID WASTE ORDINANCES FOR LE SUEUR, NICOLLET AND SIBLEY  
COUNTIES..... 174*

*APPENDIX 6: CURRENT CONTRACT WITH WASTE MANAGMENT..... 287*

**REFERENCES .....297**

## LIST OF TABLES

Table 1.1: Updated Programs for the 2013 Plan Update .....	2
Table 1.2: Policy Areas, Policy Statements and Strategic Issues.....	13
Table 1.3: Goals, Strategies and Programs for Tri-County Solid Waste Management.....	14
Table 1.4: Summary of Anticipated Solid Waste Budgets.....	22
Table 2.1: Le Sueur County Land Use/Cover Statistics.....	32
Table 2.2: Nicollet County Land Use/Cover Statistics.....	32
Table 2.3: Nicollet County Land Use/Cover Statistics.....	33
Table 2.4: Past Population and Household Trends for Le Sueur, Nicollet and Sibley Counties.....	37
Table 2.5: Population Distribution – Le Sueur County.....	39
Table 2.6: Population Distribution –Nicollet County.....	39
Table 2.7: Population Distribution –Sibley County .....	40
Table 2.8: Employment and Wages of Counties .....	42
Table 2.9: Median Household and Per Capita Incomes (2011) .....	43
Table 2.10: Employment Projections by Industry in South-west Minnesota .....	43
Table 2.11: Housing Situation in Le Sueur County .....	43
Table 2.12: Housing Situation in Nicollet County .....	44
Table 2.13: Housing Situation in Sibley County.....	44
Table 2.14: Solid Waste Collection/Disposal Information (in tons) for 2011 .....	46
Table 2.15: Greater Minnesota Sampling Summary.....	47
Table 2.16: Greater Minnesota Weighting Factors by Facility.....	47
Table 2.17: Greater Minnesota Reported Composition of Mixed Loads .....	47
Table 2.18: Greater Minnesota MSW Composition - Estimates of Materials in MSW (by weight) .....	48
Table 2.19: Solid Waste Facilities in the Tri-County Service Area .....	50
Table 2.20: Le Sueur County Municipal Refuse Collection Programs .....	51
Table 2.21: Nicollet County Municipal Refuse Collection Programs .....	52
Table 2.22: Sibley County Municipal Refuse Collection Programs.....	53
Table 2.23 Demolition & Construction Debris in Cubic Yards.....	54
Table 2.24: Le Sueur County Special Waste Recycling (in tons) for 2011.....	55
Table 2.25: Nicollet County Special Waste Recycling (in tons) for 2011.....	55

Table 2.26: Sibley County Special Waste Recycling (in tons) for 2011 .....	55
Table 2.27: Le Sueur County General Recycling (in tons) for 2011 .....	56
Table 2.28: Sibley County General Recycling (in tons) for 2011 .....	56
Table 2.29: Nicollet County General Recycling (in tons) for 2011 .....	57
Table 2.30: Disposal Practices of Residential and Commercial Generators -Le Sueur County (2011) <sup>1</sup> .....	57
Table 2.31: Disposal Practices of Residential and Commercial Generators -Nicollet County (2011) <sup>1</sup> .....	58
Table 2.32: Disposal Practices of Residential and Commercial Generators -Sibley County (2011) <sup>1</sup> ..	58
Table 3.1: Goals for Solid Waste Improvement under the Existing Integrated System .....	66
Table 3.2: Wilmarth Fuel Usage/Ash Disposal.....	76
Table 3.3: Tri-County Participation at the Blue Earth County Hazardous Waste Facility .....	85
Table 3.4: Tri-County Mobile Collection Events .....	85
Table 3.5: Sibley County Resident Participation at the McLeod County Hazardous Waste Facility ...	85
Table 3.6: Le Sueur County Resident Participation at the Scott County Hazardous Waste Facility....	85
Table 3.7: Ponderosa Landfill Tonnage Disposal .....	88
Table 3.8: MSW Tons Disposed at SRRMF, 2007-2011.....	93
Table 3.9: 2011 Operation and Maintenance Cost for the Tri-County’s Integrated System.....	95
Table 3.10: 2011 Operation and Maintenance Cost for Le Sueur, Nicollet and Sibley Counties.....	96
Table 3.11: Goals and Strategies Proposed to Improve the Integrated System .....	99
Table 4.1: MSW Management Targets for the Next Ten Years.....	105
Table 4.2: Cumulative Annual Solid Waste Reduction Targets.....	106
Table 4.3: Annual Staff Time (FTE) on Solid Waste Reduction Programs.....	107
Table 4.4: Annual Staff Time (FTE) on Solid Waste Education Programs.....	110
Table 4.5: Annual Tons of Solid Waste Recycled by Generators .....	113
Table 4.6: Annual Staff Time (FTE) on Recycling Programs .....	114
Table 4.7: 2011 Yard Waste Materials in Cubic Yards .....	115
Table 4.8: Yard Waste/Compost Sites available in the Tri-County .....	116
Table 4.9: Staff Hours Required (FTE) in Implementing the Yard Solid Waste Programs .....	117
Table 4.10: Staff Hours Required (FTE)in Implementing the Source-Separated Organic Materials Programs.....	120

Table 4.11: Annual Solid Waste Tons Dedicated to RDF Processing.....	121
Table 4.12: Projected Annual RDF from the Tri-County .....	122
Table 4.13: Annual RDF Processed / Used by the Wilmarth WTE Facility .....	122
Table 4.14: Staff Hours Required (FTE) in Implementing the Resource Recovery Programs .....	122
Table 4.15: Staff Hours Required (FTE) in Implementing the MSW Land Disposal Programs .....	124
Table 4.16: Number of Tires Generated .....	125
Table 4.17: Staff Hours Required (FTE) in Implementing the Waste Tire Programs .....	126
Table 4.18: Annual Quantity of Electronic Products Recovered .....	128
Table 4.19: Staff Hours Required (FTE) in Implementing the Programs for Electronic Products ...	128
Table 4.20: Annual Quantity of Major Appliance Recovered.....	130
Table 4.21: Staff Hours Required (FTE) in Implementing the Major Appliance Programs .....	130
Table 4.22: Staff Hours Required (FTE) in Implementing the Programs for Automotive Mercury, Fluids & Batteries .....	133
Table 4.23: Annual Quantity of Household Hazardous Solid Waste Recovered .....	135
Table 4.24: Staff Hours Required (FTE) in Implementing the HHW Programs .....	138
Table 4.25: Annual Quantity of Recovered Demolition Debris.....	140
Table 4.26: Permitted Demolition Debris Facilities and Number of Permits-by-rule .....	140
Table 4.27: Staff Hours Required (FTE) in Implementing the Demolition Debris Programs .....	141
Table 4.28: Staff Hours Required (FTE) in Implementing the Illegal Disposal Management Programs .....	142
Table 4.29: Estimated Staffing Requirements in Implementing the Programs.....	144
Table 5.1: Staff Hours in Managing On-Site Disposal of MSW by Farms or Households .....	149

## LIST OF FIGURES

Figure 1.1: Solid Waste Management Hierarchy of Preferred Methods.....	2
Figure 1.2: Regional Ten-year Forecast for Solid Waste Generation .....	7
Figure 1.3: Le Sueur County’s Ten-year Forecast for Solid Waste Generation.....	7
Figure 1.4: Nicollet County’s Ten-year Forecast for Solid Waste Generation.....	8
Figure 1.5: Sibley County’s Ten-year Forecast for Solid Waste Generation .....	8
Figure 1.6: System Objectives for the Region (all three counties) by the Year 2022.....	11
Figure 1.7: System Objectives for Le Sueur County by the Year 2022.....	12
Figure 1.8: System Objectives for Nicollet County by the Year 2022.....	12
Figure 1.9: System Objectives for Sibley County by the Year 2022 .....	12
Figure 2.1: Tri-County Solid Waste Service Area .....	24
Figure 2.2: Map of Le Sueur County .....	26
Figure 2.3: Map of Nicollet County with all major road networks .....	27
Figure 2.4: Map of Sibley County.....	28
Figure 2.5: Watersheds in Le Sueur County Area .....	29
Figure 2.6: Watersheds in Nicollet County Area .....	30
Figure 2.7: Watersheds in Sibley County Area.....	31
Figure 2.8: Map of Existing Land Uses – Le Sueur County.....	34
Figure 2.9: Map of Existing Land Uses - Nicollet County.....	35
Figure 2.10: Map of Existing Land Uses - Sibley County.....	36
Figure 2.11: Population of Le Sueur County (2011) .....	37
Figure 2.12: Population of Nicollet County (2011) .....	38
Figure 2.13: Population of Sibley County (2011).....	38
Figure 2.14: Population Projection of Counties.....	41
Figure 2.15: Labor Force Outlook for Le Sueur, Nicollet and Sibley Counties.....	41
Figure 2.16: Solid Waste Generating Formula .....	45
Figure 2.17: Annual Waste Generated by Counties.....	46
Figure 2.18: Summary of Greater Minnesota MSW Composition.....	48
Figure 3.1: Regional Integrated Waste Management System.....	63
Figure 3.2: RRT RDF facility waste processing schematic.....	72

Figure 4.1: Summary on the Number of Solid Waste Programs to be implemented for the next 10 years ..... 143

Figure 4.2: Total Estimated Annual Budget for Le Sueur, Nicollet, and Sibley Counties as well as the Tri-County Office..... 144

## ACRONYMS AND ABBREVIATIONS

<b>BCL</b>	Brown County Landfill
<b>BMPs</b>	Best Management Practices
<b>C&amp;D</b>	Construction and Demolition Waste
<b>CII</b>	Commercial/Industrial/Institutional
<b>CRT</b>	Cathode Ray Tube
<b>CSI</b>	County Supporting Initiative
<b>EAW</b>	Environmental Assessment Worksheet
<b>EPA</b>	Environmental Protection Agency
<b>EPP</b>	Environmentally Preferable Purchasing
<b>GVT</b>	Goal Volume Table
<b>HDPE</b>	High-Density polyethylene
<b>HHW</b>	Household Hazardous Waste
<b>MDA</b>	Minnesota Department of Agriculture
<b>MLCL</b>	Maximum Leachable Control Limits
<b>MPCA</b>	Minnesota Pollution Control Agency
<b>MSW</b>	Mixed Municipal Solid Waste
<b>MWP</b>	Mixed Waste Processing
<b>MWPC</b>	Minnesota Waste Processing Company
<b>NOV</b>	Notice of Violation
<b>NPDES</b>	National Pollution Discharge Elimination System
<b>NSP</b>	Northern States Power Company
<b>PCBs</b>	Polychlorinated Biphenyls

<b>PMC</b>	Ponderosa Management Company
<b>QA/QC</b>	Quality Assurance/Quality Control
<b>RAM</b>	Recycling Association of Minnesota
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RDF</b>	Refuse-Derived Fuel
<b>dRDF</b>	densified Refuse-Derived Fuel
<b>RRT</b>	Resource Recovery Technologies
<b>SCORE</b>	Select Committee on Recycling and the Environment
<b>SRRMF</b>	Spruce Ridge Resource Management Facility
<b>SWMCB</b>	Solid Waste Management Coordinating Board
<b>SWAC</b>	Solid Waste Advisory Committee
<b>VSQG</b>	Very Small Quantity Generator
<b>WMI</b>	Waste Management Incorporated
<b>WMA</b>	Waste Management Act
<b>WTE</b>	Waste-to-Energy

# CHAPTER ONE - EXECUTIVE SUMMARY

## 1.1 BACKGROUND

Le Sueur, Nicollet and Sibley Counties hereafter referred to as the Tri-County, collaborated to develop an integrated solid waste management system to protect public health and offer convenient and efficient services for residents and businesses of these counties. These contiguous counties, located in South Central Minnesota have worked closely with each other (since 1987) as partners in the Tri-County Solid Waste Joint Powers Board. This Tri-County effort represents a continued effort by these counties to conserve resources, protect the environment and meet the public's goals for solid waste management.

Since the flow of waste occurs across state and county lines, regional cooperation is a key component of a successful solid waste program. This collaborative planning effort taken by the Tri-County to work in a cooperative manner on solid waste issues will be encouraged and continued.

Federal and State rules and regulations affecting solid waste management, in addition to technologies available, are always subject to change. Although these changes may supply the answer to the nation's waste management situation, careful consideration must be given to the fact that unproven technology may have associated risks not yet realized. Due to these potential changes occurring in solid waste management, it is important to incorporate a degree of flexibility in any plan.

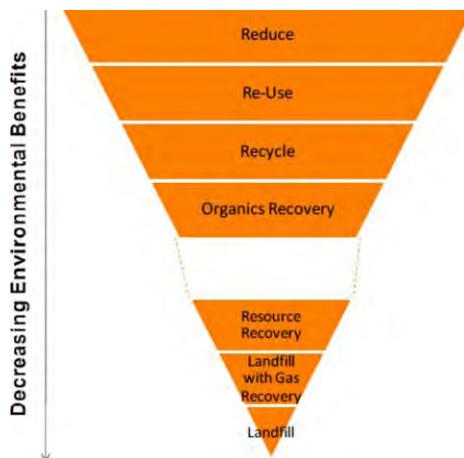
The Tri-County Solid Waste Joint-Powers Board consists of representatives from Le Sueur, Nicollet, and Sibley Counties. Two commissioners from each county serve on the Joint Powers Board. This Joint Powers Board was established in 1988 to pool the counties' solid waste resources together so that cumulatively the counties could benefit from economies of scale.

The Tri-County Solid Waste Office administers and directs the counties' solid waste & recycling programs, household hazardous waste, resource recovery, problem materials and educational programs. Each county is responsible for solid waste enforcement, although guidance and expertise is provided by the Tri-County staff.

This Tri-County plan describes current and future measures to meet goals for waste reduction, recycling, household hazardous waste and landfill abatement (as indicated in the Goal Volume Table at Appendix 1). In the developing these measures, attention is paid to the "solid waste management hierarchy of preferred methods" in order to maximize environmental benefits. The hierarchy as shown in Figure 1.1 illustrates that environmental benefits increase if solid waste management measures target the top measures (waste reduction, reuse, recycling, and organics recovery). The "gap" between the top and bottom

measures (resource recovery and landfilling) signifies the level where the environmental benefits of a jurisdiction’s waste management practices is very insignificant.

Figure 1.1: Solid Waste Management Hierarchy of Preferred Methods



As summarized in Table 1.1, this plan also contains modifications to the existing programs while new programs (italicized in the Table) have also been added. These modifications are according to the MPCA’s Solid Waste Plan Review Checklist, which was based upon provisions in Minn. Stat. § 115A. For instance, “Used Oil Management” and “Battery Management” now have a new program category, “Automotive Mercury Switches, Motor Vehicle Fluids and Filters, and Lead-Acid and Dry Cell Batteries”. Again, “Fluorescent bulbs and tubes” and “Waste electronic appliances” are all now grouped under “*Electronic Products*”. In addition, instead of the initial requirement for a five year plan review and update, the Statute now mandates a ten year review and update (Minn. R. 9215.0730). Appendix 4 contains the definition of these programs.

Table 1.1: Updated Programs for the 2013 Plan Update

Programs in the 2001 Plan	Programs in the 2013 Plan
Source Reduction	Source Reduction
Waste Education	Waste Education
Recycling	Recycling
Yard Solid Waste Management	Yard Solid Waste Management
MSW Composting	<i>Source Separated Organic Materials Composting</i>
Land Disposal of MSW	MSW Composting
Waste Tire Disposal and Recovery	Solid Waste Tire Management Programs
Major Appliance Management	MSW Land Disposal Facilities
Used Oil Management	Automotive Mercury Switches, Motor Vehicle Fluids And Filters, And Lead-Acid And Dry Cell Batteries
Battery Management	<i>Solid Waste Incineration and Energy Recovery</i>
Household Hazardous Waste Management	Household Hazardous Waste Management
Demolition Debris	Demolition Debris
Fluorescent bulbs and tubes	Electronic Products
Waste electronic appliances	Major Appliance Management

### **1.1.1 Overview - Collaborative Solid Waste Planning and Management Framework**

This plan reviews the past and present solid waste management system, solid waste abatement programs and policies, and anticipated solid waste management activities. The plan considers various alternatives to attain the most feasible and prudent reduction of the need for land disposal of mixed municipal solid waste (MSW) for these three counties.

This plan in some instances proposes the continuation (and sometimes expansion) of existing solid waste programs operated by all three counties and the Tri-County Solid Waste Joint-Powers Board, and/or the introduction of new programs to help meet set solid waste reduction and recycling targets. The Counties remain strong as active partners in the Tri-County Solid Waste Joint-Powers Board, and continues to support the Board's efforts.

### **1.1.2 Stakeholders' Participation in the Plan Process**

Stakeholder participation in the planning process consists of members of the Tri-County Solid Waste full board members, Tri-County Executive Sub-Committee members, Sibley, Le Sueur and Nicollet County Solid Waste Officers, our Member-At-Large, Private waste haulers, Blue Earth County Environmental Services staff, citizens and Minnesota Pollution Control Agency (MPCA) staff. The Tri-County Solid Waste joint powers board meets a minimum of four (4) times per year, additional full board and Executive Sub-Committee meetings are held throughout the year and are open to the Public. Meetings are also conducted with Private Haulers, Businesses, City Administrative Staff, Township members to discuss any and all related solid waste and recycling issues, ordinances and State Statutes under Chapter 400 and Minn. Stat. § 115A

## **1.2 OVERVIEW OF CURRENT SOLID WASTE SYSTEM AND WASTE FLOW**

Waste is complex. Waste is much more than what most people think is garbage, refuse, or trash. Waste is anything that a household, business or institution no longer needs. Waste can be relatively harmless, or be toxic or potentially harmful. The State of Minnesota has crafted a variety of laws and rules that regulate trash so that risk to public health and the environment can be managed. For example, products that contain mercury are banned from the trash, and have to be managed separately. Wastes that are toxic, corrosive, flammable and that are produced by businesses are strictly regulated by federal, state and local law. Because waste is complex, the "waste management system" is complex, and is actually a large number of smaller systems put in place to safely handle discarded materials. Except for discarded prescription medications, household hazardous waste (HHW) and agriculture herbicides and pesticides, the Tri-County staff do not directly collect, handle or manage waste. State law includes a preference for private sector management of waste. In fact, many entities, including for-profit-businesses and non-profits provide a wide array of waste management services throughout the Tri-County. To help accomplish the goals set by the MPCA and the standards set by Minnesota law, and to assure protection of the environment, public health and safety, goals and

programs have been adopted by the Tri-County and are specified under section 1.5.

This new solid waste plan details existing solid waste management procedures in the Tri-County area and recommends alternatives for the future. Tri-County Solid Waste has historically relied on and supported the advancement of the private sector in solid waste management. The Minnesota Waste Management Act and SCORE legislation have given counties increased responsibilities for solid waste management, but funding provided by the State has not been commensurate with these increased responsibilities and requirements.

Solid waste collection in the Tri-County is a combination of commercial and individual services. Most cities contract with haulers to service their communities. Other than these cities, waste is either, collected by commercial haulers, under direct agreement between the hauler and the generator (the City), is self-hauled by one city, or hauled to various disposal sites by individual waste generators. It is estimated that approximately 95% of the waste generated in Nicollet County, 87% of the waste generated in Sibley County and 93% of the waste generated in Le Sueur County is collected by commercial or municipal haulers. All residents in the Tri-County either have municipal haulers or can contract with a collection service.

There are currently no open landfills operating within the Tri-County borders. Public Entity waste and other waste generated from within the counties is currently managed through the Minnesota Waste Processing Company (MWPC) Transfer Station located in Mankato where it is then transported to the Newport Resource Recovery Facility and processed into refuse derived fuel (RDF) for use at the Xcel Energy Wilmarth waste to energy power plant in Mankato, with the residuals being deposited in a dedicated cell located in the Ponderosa Landfill in Blue Earth County. All other waste generated within the counties is disposed at one of the surrounding landfills such as the Ponderosa landfill in Blue Earth County, Brown County Landfill outside of New Ulm, the Spruce Ridge Landfill in McLeod County or the Burnsville landfill in the metro area. Prior to this new solid waste plan, some solid waste was trucked to the Lake Mills landfill located in northern Iowa. Demolition and construction materials are mostly disposed at the SMC Demolition & Construction landfill outside of Mankato, the Valley Demolition landfill outside of New Ulm, located in Nicollet County, the Spruce Ridge Demolition landfill located in McLeod County or the Dem Con landfill located in Scott County outside of Shakopee, MN.

Recycling efforts in the Tri-County area have been a combination of public and private operations. Materials generally recycled are glass, corrugated cardboard, aluminum and steel/tin cans, #1 through #7 plastics, newsprint, magazines, mixed paper, and textiles. Communities, townships, and private businesses alike arrange for their own collection

and transportation of recyclables. The Tri-County Solid Waste Joint Powers Board and Nicollet County pay for the processing and marketing of recyclables. Recycling rates have consistently exceeded 45% in the three Counties.

It is estimated that 264.56 tons per day of solid waste are generated in Le Sueur, Nicollet and Sibley Counties of which 7.25 tons per day are disposed of on private property, 123.72 tons per day are hauled over Tri-County borders for landfilling, 42.19 tons per day leave the counties for processing, 80.49 tons per day are recycled, 55.61 tons per day of yard wastes are composted, and 9.12 tons per day of special wastes are generated.

### **1.3 RECOMMENDED PLAN FOR SOLID WASTE MANAGEMENT**

The Minnesota Pollution Control Agency (MPCA) requires all counties to assess the feasibility of resource recovery when completing the solid waste management plans.

It is recommended that the Tri-County continue to pursue the following state solid waste management hierarchy to the extent possible emphasizing the continued utilization of existing and future local options:

Pursuant to the Statutes of State of Minnesota, Chapter 115A.02, section (b). The waste management goal of the state is to foster an integrated waste management system in a manner appropriate to the characteristics of the waste stream. The following waste management practices are in order of preference (as already shown in Figure 1.1):

1. Waste reduction and reuse;
2. Waste recycling;
3. Composting of yard waste and food waste;
4. Resource recovery through mixed municipal solid waste composting or incineration; and
5. Land disposal.

In 1999, the “land disposal” component (5) of the State’s hierarchy was revised further broken into the following:

5a. Land disposal which produces no measurable methane gas or which involves the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.

5b. Land disposal which produces measurable methane and which does not involve the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.

State law requires the development of county solid waste reduction, recycling, yard waste management, and household hazardous waste programs. In addition, state law requires

that Greater Minnesota counties consider and, where feasible and prudent, implement programs to process mixed municipal solid waste by solid waste composting, incineration or other mixed waste processing techniques.

As a part of the Tri-County's commitment to an alternative solution to the disposal of solid waste, the Tri-County will continue to generally endorse the current public/private enterprise system in place which utilizes and maximizes the existing resource recovery facilities.

The current system includes the Minnesota Waste Processing Company (MWPC) Transfer Station located in Mankato and Resource Recovery Technologies' (RRT) Resource Recovery Facility in Newport. Solid waste materials are then processed to produce refuse derived fuel (RDF) or the burnable fraction. The RDF is then transported to the Wilmarth Power Generating Plant in Mankato for use in the production of electricity. The residual waste (approximately 10% or less) from the waste processing is landfilled in a separate dedicated lined cell at the Ponderosa Landfill near Mankato.

Ash, generated from the Wilmarth Facility is disposed of in a lined mono-fill landfill adjacent to the Ponderosa Landfill located in Blue Earth County. Originally, this system which began on October 1, 1993, included the Prairieland MSW Compost Facility; however, they no longer have capacity for waste from the Tri-County area. Most residential waste from the communities (Public Entities) within the Tri-County is under contract to be brought into this integrated system.

Since these technologies and facilities are currently available, operational, and viable, and because there is a mature system in place, Tri-County continues to prefer this integrated system as the primary disposal option for waste generated in their jurisdiction. If future agreements cannot be reached for the use of these facilities, the Tri-County supports other similar resource recovery technologies; because the State of Minnesota has determined that the processing of waste is an environmentally preferred management method. The State has also ranked waste processing above the landfilling of unprocessed waste on the State's hierarchy as provided in Minnesota Statute 115A.02, section (b).

Therefore, the Tri-County's goal is to continue to support and prefer resource recovery technologies that have the potential to realize at least an 85% volume reduction in the solid waste that is produced. It is the Tri-County's intent in this recommendation to allow municipalities, upon prior consent of the jurisdictional county, to contract with other firms who offer an integrated solid waste management system with waste processing consistent with the implementation of this multi-county plan. Other disposal options may, however, be utilized consistent with the State of Minnesota's waste management hierarchy.

The Tri-County also has a progressive residential and commercial recycling program. The quantity of waste recycled is expected to exceed 50% of the waste generated over the next ten years through existing and proposed residential and commercial recycling programs. Figures 1.2, 1.3, 1.4, and 1.5 –which is an extract from each County’s Goal Volume Table (GVT) - show the projected waste generation for the Region, Le Sueur, Nicollet and Sibley Counties respectively. The proposed system includes county wide waste abatement programs, public education programs, and the continued use of a nearby landfill for disposal of residuals. Waste reduction is expected to exceed three percent of the waste generation rate in ten years.

Figure 1.2: Regional Ten-year Forecast for Solid Waste Generation

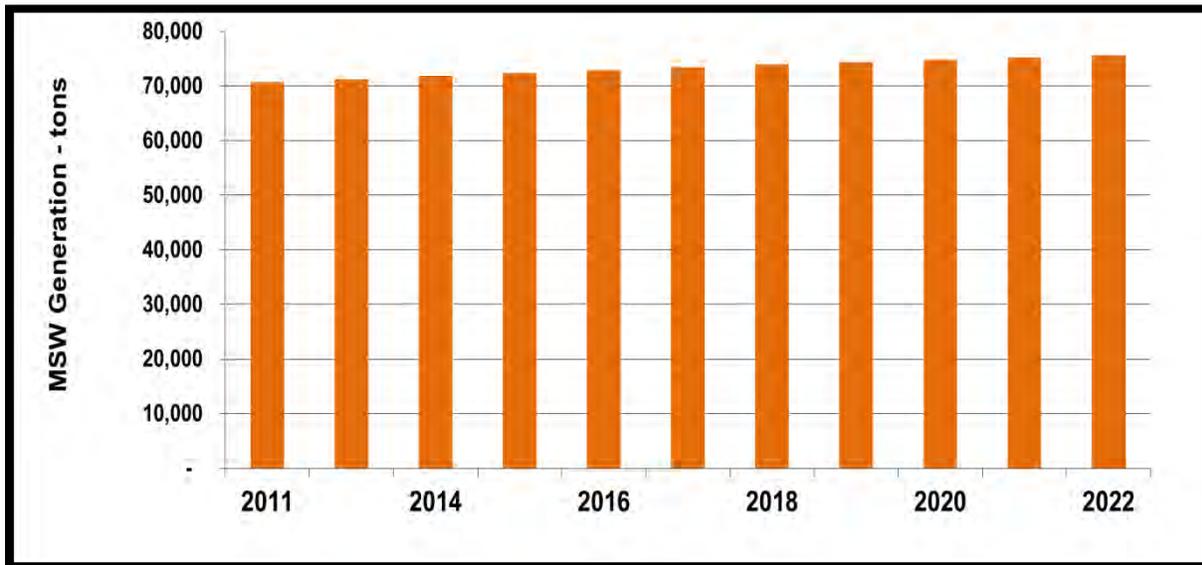


Figure 1.3: Le Sueur County’s Ten-year Forecast for Solid Waste Generation

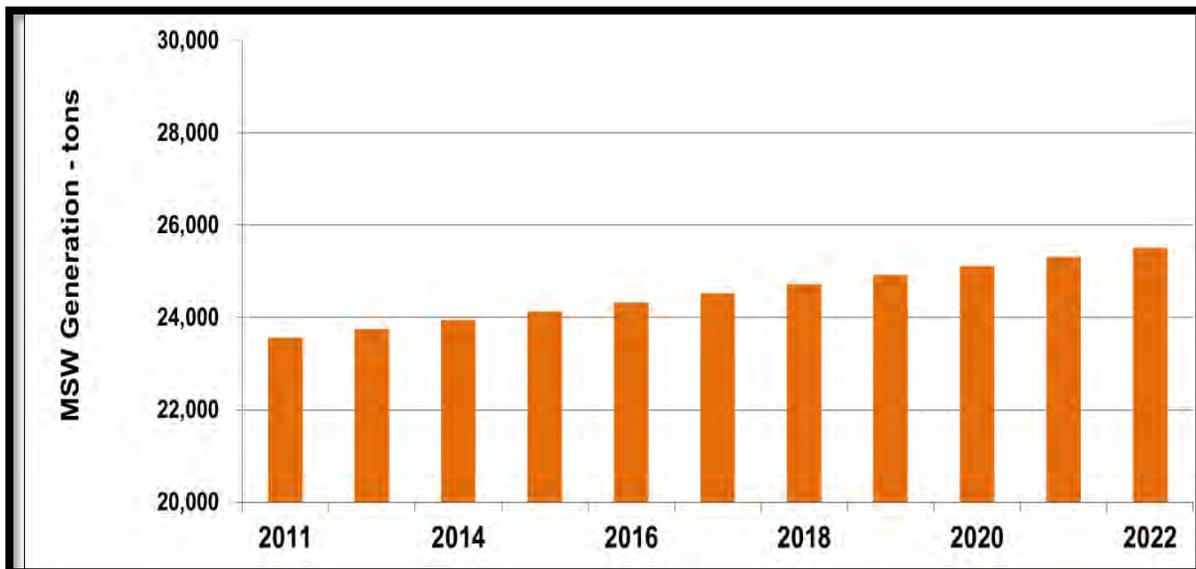


Figure 1.4: Nicollet County's Ten-year Forecast for Solid Waste Generation

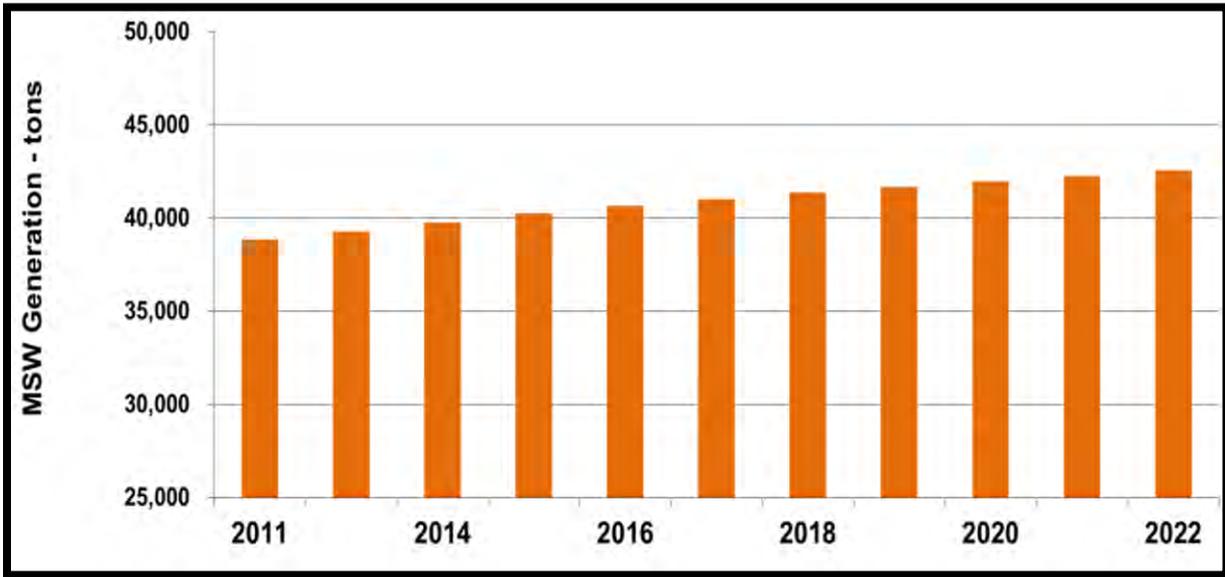
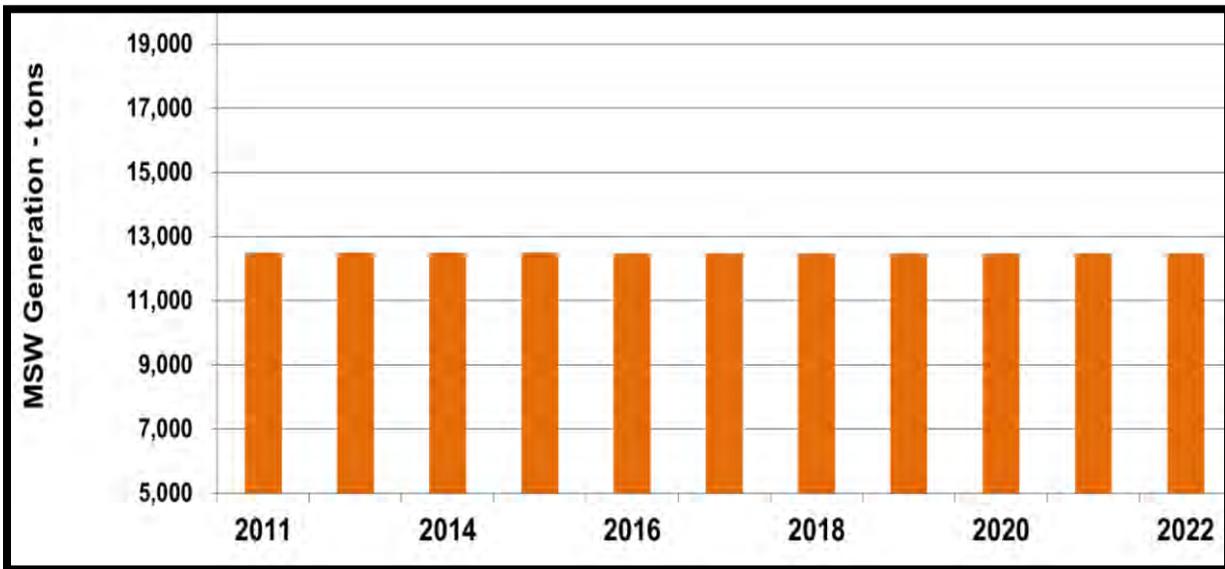


Figure 1.5: Sibley County's Ten-year Forecast for Solid Waste Generation



Currently, two of the counties (Sibley & Le Sueur) have a recycling contract with Waste Management, Inc. and Nicollet County has a separate agreement with the City of North Mankato, with each operation being slightly different. It is recommended that to make recycling more consistent within the three counties and to increase opportunities, the Tri-County will continue to explore all options for providing uniform service.

It is recommended that the Tri-County petition the MPCA to receive increased SCORE funding, based on the projected population increase for the Tri-County area as well as its

support of the State solid waste hierarchy. This is also based on the Tri-County's active support of recovery, while most neighboring counties are not.

It is recommended that the Tri-County and the MPCA continue to pursue all avenues available to get Xcel Energy to remove the \$16+/ton burn incentive from RDF being utilized at the Wilmarth Power Plant in Mankato.

It is recommended that to insure that all waste generated in the Tri-County area is managed in an aesthetically and environmentally responsible manner that each county will investigate banning on-site disposal when reasonable service is available.

#### **1.4 CONTINGENCY SOLID WASTE MANAGEMENT SYSTEM**

The Tri-County integrated waste management system is a mature system that is working to meet the goals and policies of this plan as well as meet the MPCA preferred waste management plans. The fate of the current system will largely be decided by what occurs in the coming years between Washington & Ramsey Counties, RRT (the current owner of the Newport processing facility and Xcel Energy – owner of the Wilmarth waste to energy facility) Currently, Washington and Ramsey Counties have a processing agreement with RRT through 2015. This agreement includes an exclusive option to purchase the facility if RRT decides to sell, decides to stop using the facility to process waste, or defaults on the agreement. There is an unconditional exclusive option beginning January 1, 2015 through that calendar year. If Ramsey and Washington Counties exercise the option in 2015, RRT has the right to reject the purchase. If they do, then the agreement automatically extends two years through 2017; RRT must meet its obligations and guarantees; and the Counties have a right of first refusal during the extended term.

If the current resource recovery system dramatically changes after 2015 or other emerging technologies are approved by the MPCA as being able to meet the goals and policies stated under MN Statute 115A for processing solid waste materials, the Tri-County would then consider the options available at that time and work with the MPCA to continue preserving its solid waste processing goals. During that time, the Tri-County would continue to promote the solid waste management hierarchy of preferred methods of reduce, re use, recycle and household hazardous waste management in order to maximize environmental benefits. The Tri-County would also proceed with an evaluation and preliminary planning process for waste management options of the following alternative technologies that are emerging.

1. Gasification – A thermal process that converts solid waste to a synthetic gas (syngas), using limited amounts of air or oxygen.
2. Pyrolysis – A thermal process that breaks down solid waste without air or oxygen and uses heat to produce syngas.

3. Plasma arc – A process that uses very high temperatures (5,000 to 13,000 degrees Fahrenheit) to breakdown waste into elemental byproducts,
4. Mass Burn Waste-To-Energy – A process that burns solid waste in a combustion chamber, without presorting of waste components, and recovers heat energy.
5. Anaerobic Digestion – A process that decomposes the organic (carbon-based) portion of solid waste in the absence of oxygen, producing syngas or natural gas, and a digestate with a liquid and solid component.
6. Mixed Waste Processing – MWP – Also known as “front-end separation,” this is a process that removes recyclable materials from mixed solid waste; it can either be stand-alone or be part of a front-end process before another technology.
7. Plastic to Fuel – A process that uses heat and distillation to convert various plastics into oil.

The type and amount of mixed municipal solid waste available in the future needs to be considered when reviewing applicable technologies. Projecting waste volumes takes into consideration the changes likely to occur in the solid waste system, with increased levels of recycling and separate management of other wastes such as organic waste. The waste composition over time is expected to change as well, with reduced volumes of recyclable paper, glass, metal and organics. The type and amount of materials that are discarded in the Tri-County depends heavily on a number of factors, such as changes in population, the economy, consumer habits, and types of commercial industry development. When comparing these technologies the Tri-County will consider the following parameters:

- ❖ Whether the technology is proven in North America;
- ❖ Is there available documented system cost information;
- ❖ MPCA permitting a new technology & due diligence process time frame
- ❖ Present system flexibility and in the years to come; and
- ❖ Will the technology be applicable to the Tri-County solid waste characteristics.

Should there be a dramatic negative change of circumstances to the current integrated waste to energy where perhaps the processing of solid waste is hampered or becomes financially unstable and the Tri-County only recourse is to consider other technologies more landfilling may become an unfortunate short term side effect. This term would only last until other processing technologies(s) would become approved by the MPCA as meeting the goals and policies under MN Stat 115A.

### 1.5 POLICY AREAS, GOALS, PROGRAMS AND BUDGET FOR SOLID WASTE ABATEMENT PROGRAMS FOR THE NEXT TEN YEARS

“Consistent with the State hierarchy, Sibley, Le Sueur and Nicollet Counties affirms processing of waste, for the purpose of recovering energy and recyclables 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 Tri-County and specifically to MSW generated by public entities including contracts for organized collection of solid waste. Pursuant to State law, public entities in the Tri-County will assure that MSW that they generate or contract for is processed rather than land disposed.”

The goals and programs developed here are anchored on: the measurable system objectives specified in each County’s Goal Volume Table (see Figures 1.6, 1.7 and 1.8 for the solid waste objectives); and four inter-related policy areas. Each of these policy areas has a policy statement and strategic issues to be addressed (outlined in Table 1.2) for this 10-year plan period. The goals, strategies and programs developed (presented in Table 1.3) incorporate the strategic issues outlined in the four policy areas. Chapter Four of this plan provides details on the implementation schedule of the programs.

Figure 1.6: System Objectives for the Region (all three counties) by the Year 2022

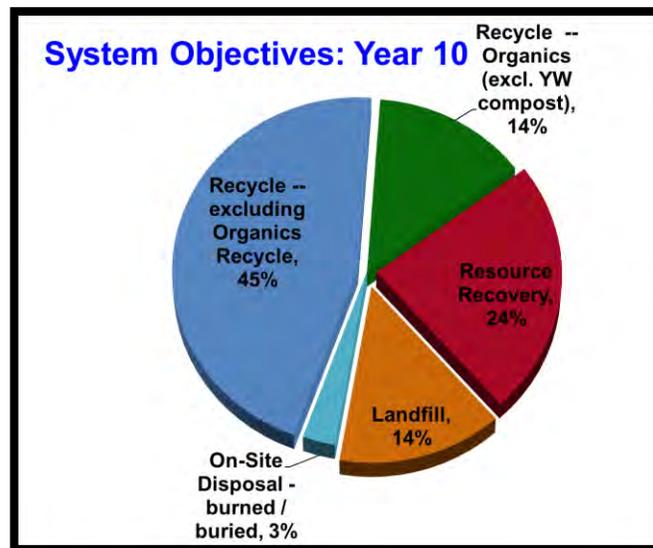


Figure 1.7: System Objectives for Le Sueur County by the Year 2022

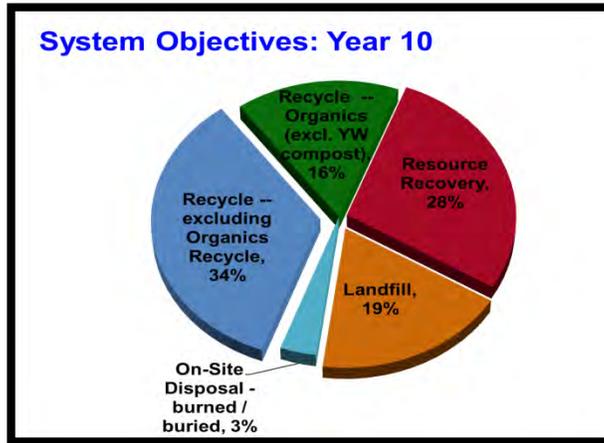


Figure 1.8: System Objectives for Nicollet County by the Year 2022

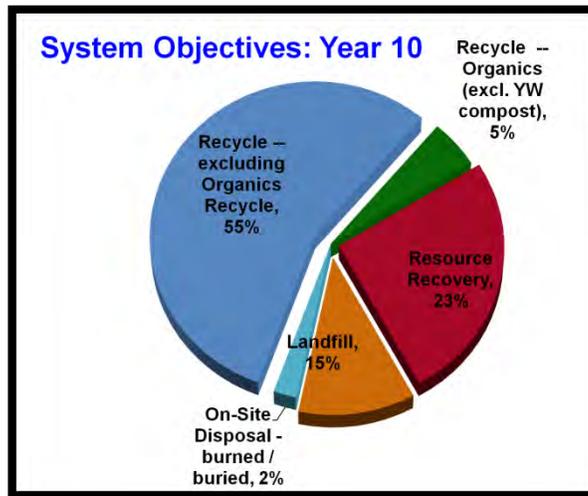


Figure 1.9: System Objectives for Sibley County by the Year 2022

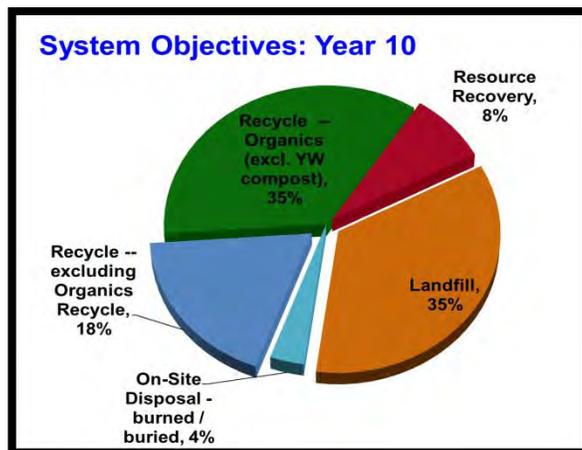


Table 1.2: Policy Areas, Policy Statements and Strategic Issues

Policy Area	Policy Statement	Strategic Issues
<b>Protect and Conserve</b>	Manage waste in a manner that will protect the environment and public health, reduce greenhouse gas emissions, and conserve energy and natural resources.	Reduce greenhouse gas emissions and promote energy and resource conservation through integrated solid waste management.
		Reduce the hazardous character of waste and assure proper management of hazardous waste materials.
		Promote actions that conserve energy, and will encourage the use of renewable energy, which includes recovering energy from waste.
		Manage solid waste in a manner that will minimize environmental, financial, and public health burdens on future generations.
		Ensure public health is protected by reducing waste, recycling and composting (or other organics management) a majority of the waste, and through the proper disposal of what remains.
<b>Integrate the Pieces</b>	Manage waste in the integrated waste management system in accordance with the hierarchy to minimize landfilling, while emphasizing reducing waste generation and toxicity and increasing reuse, recycling, and source-separated organic waste management.	Manage waste in accordance with the preferred methods in the waste management hierarchy.
		Manage solid waste in accordance with the numerical targets identified in the Goal Volume Tables of the Tri-County Solid Waste Plan.
		Whether public or private, hold the operators of any solid waste system segment responsible for meeting the goals of this Plan.
<b>Manage Waste Cost-Effectively and Internalize Future Costs</b>	Manage waste in a cost-effective manner that maximizes environmental benefits and minimizes long-term financial liability and be priced to provide incentives that encourage waste to be managed as high as possible on the waste hierarchy.	Promote efficiencies and cost effectiveness and reduce environmental costs in the delivery of integrated solid waste management services, including minimizing risk and managing for long-term care of landfills.
		Promote governance of solid waste management that results in the implementation of the Waste Management Act, resulting in: pollution prevention and decreased land disposal; the fair allocation of costs and liabilities; the efficient provision of services; the promotion of innovation; the fostering of private initiative and new technologies; and the provision of services that meet the diverse needs within the region.
<b>Share Responsibility</b>	Allocate responsibility and costs for the environmentally sound management of waste equitably among those who use or benefit from the system, including producers, retailers, consumers, government, citizens, and the waste industry.	Generators and product producers share responsibility for waste produced, and costs for waste disposal should be borne in the present by producers and generators and not deferred to future generations.
		Provide incentives for waste reduction and recycling, separate management of organic wastes, and resource recovery through pricing of solid waste management services. Costs should be visible to, and understandable by those paying for system services.

Table 1.3: Goals, Strategies and Programs for Tri-County Solid Waste Management

Management Area	Goals	Strategies	Programs
<b>Source Reduction</b>	Explore avenues to encourage residents and businesses to reduce their solid waste.	Work with businesses and their manufacturing suppliers to demonstrate options for reducing waste generation. Encourage Product Stewardship Programs.	Targeted outreach to businesses that have strong source reduction potential. Work directly with manufacturers on product stewardship models
			Source reduction promotion and assistance especially to rural areas and farming operations as part of expanded rural waste management programs.
		Provide educational material to residents and businesses on methods for reducing solid waste.	Explore opportunities to legislatively work with other Counties, local representatives and environmental groups to implement more product stewardship models and source reduction legislation.
			Look at opportunities to encourage re-use such as move-out day at Gustavus College.
		Promote volume-based pricing to give generators of waste a clear incentive to reduce the amount of waste generated.	Further develop purchasing guidelines that support source reduction and work with local manufacturers to implement source reduction into their products.
	Consider creating greater source reduction incentives through variable-rate or volume based pricing requirements for solid waste collection.		
<b>Waste Education</b>	Develop and implement a comprehensive waste management education strategy.	Raise public awareness on solid waste best management practices (BMPs).	Public service announcements on the local cable access channel and in newspapers at least once every three months
			Development and use of traveling displays promoting solid waste activities/programs.
			Provide annual individual County Solid Waste Education brochures to all residents which explain County specific programs and the wide range of services provided to and available for all County residents and businesses.
			Continue to educate & encourage the development and participation of City run yard waste compost sites and to fully educate the public on the whole cycle of yard waste starting with reduction and the on-going options for yard waste disposal and composting.
			County Training program that includes information on waste abatement

Management Area	Goals	Strategies	Programs
		Build news coverage of specific programs into wider coverage of waste management programs, recycling opportunities, and the benefits of reducing the amount of waste produced.	Local television and radio appearances.
		Educate students of all ages, residents and businesses on how, when, and where solid waste can be recycled.	Continue education on source reduction, with special emphasis on toxicity reduction.
	Continue to meet and discuss waste issues with civic and business groups, cities, and school groups K-12.		Solid waste newsletter to citizens and businesses.
			Promotion of special days for handling hazardous waste.
			Educational materials and displays at local libraries, staffed booths during county fairs, school and or other civic group meetings.
			Organizing and promoting events in recycling week, and Earth Day activities.
	Visiting businesses in the counties in person with recycling and waste education information and options.		
	Educate residents and businesses on how, when, and where to properly dispose of hazardous waste.	Develop educational materials for residents and businesses that explain how, when, and where to properly dispose of hazardous waste.	Development of county specific brochures that outline where individuals and businesses can take waste within each county and how to handle it.
			Advertising to promote successful examples of source reduction by businesses.
		Raise public awareness on hazardous waste issues and dangers.	Promotion of special days for handling hazardous waste Tours of WTE, RDF and recycling facilities.
<b>Recycling</b>	Significantly increase the recycling rate for all three counties within the next ten years. Conduct more recycling programs/ events with & for our schools, 4H	Encourage recycling education efforts.	Ensure recycling education programs are sending a consistent message to residents and businesses about the importance of recycling.
			Tri County actively educates and promotes recycling programs for commercial, industrial and institutional facilities through on site visits with our waste audits and evaluation program and general

Management Area	Goals	Strategies	Programs
	Groups, Boy Scouts, Girl Scouts and Church Groups.		education programs
		Increase the participation rate of residents (especially rural ones) and businesses in recycling programs by promoting examples that have been working such as the program that Granby & Nicollet Townships have with a hauler and make recycling options more accessible.	Work with schools to ensure that students have access to recycling programs to meet MN Statute 115A. 151.
			Establish and promote recycling drop-off locations and curbside pickup options within the Cities and rural areas of the County to improve rural recycling.
			Continue efforts in using glass in rural-based materials.
			Identify new and underutilized recycling opportunities for businesses and help waste haulers and recyclers meet those needs.
			Tri Counties (Sibley & Le Sueur Counties) will be renegotiating a recycling contract with Waste Management or another entity for continued recycling service for both Counties.
			Public Entities and municipalities have and participate in existing recycling programs and curbside recycling programs that have collection of recyclables at least once per month of all statutorily required recyclable materials.
			All three County ordinance require the collection of the statutorily required recyclable materials (a minimum of 4 plus materials)
			All Government facilities have recycling programs & contracts to recycle a minimum of three plus materials.
			Currently, private businesses are encouraged to contract with a County licensed solid waste hauler for recycling services.
Some businesses such as the Taylor Corporation in Nicollet County contract with LJP Enterprises for special industry specific recycling, in this case it would be specialized paper recycling.			
Currently, local recycling market conditions fluctuate with the economy or the price of oil in general as well as supply and demand for specific market materials.			
	Work with and incentivize businesses to report data on recycling patterns to their county.	Work closely with recycling collectors to improve the quality of data, especially data on business recycling efforts.	
<b>Yard Solid Waste</b>	Comply with state restrictions on the landfill of	Explore alternatives in enforcing restrictions on the	Encourage the development and participation of City run yard waste compost sites.

Management Area	Goals	Strategies	Programs
<b>Management</b>	yard waste.	landfill of yard waste.	
	Educate the public on options for managing yard waste.	Continue to educate and encourage consumers on backyard composting and proper disposal of yard waste.	Continue to promote reduction options through mulching and backyard composting as well as the drop-off/curbside collection options.
			Organize annual Christmas trees collection with the help of cities, community volunteers, civic organizations and Sentence-to-Service crews.
			Collaborate with the Master Gardeners of both counties in disseminating information on yard waste composting.
<b>Source Separated Organic Materials</b>	Provide improved options for the collection and disposal of source separated organic materials.	Educate residents and businesses on the options available for the collection and disposal of source separated organic materials.	Work with licensed haulers to encourage collection of source separated organics through current waste collection programs especially for qualifying business entities.
			Promote a list of licensed organic material haulers available to businesses, institutions and consumers.
			Work with State, institutional and educational facilities and other entities to promote programs for SSOM composting.
			Provide education materials to encourage and promote backyard organics composting by residents and provide informational materials for business waste audits in order to identify good candidates to participate in source separated organics collection.
<b>Solid Waste Incineration and Energy Recovery</b>	Recover/discover more resources from the solid waste stream in all three counties.	Maintain existing system and seek out new partnerships with waste-to-energy (WTE) facilities.	Develop long-term waste agreements with current and future energy recovery facilities.
			Explore and develop potential partnerships between the integrated waste management system and other energy recovery facilities.
	Meet current capacity needs at the Resource Recovery & Waste to Energy Facilities.	Continue to process waste to make RDF and deliver to energy recovery facilities.	Maintain current RDF processing levels and consider options for future increases by increasing the staff and capacity of the RDF facility.
			Provide public education regarding the life cycle of garbage.
	Ensure the current needs of the WTE integrated system are being met by acquiring RDF from neighboring counties.	Develop partnerships with neighboring counties to ensure a steady supply of RDF is available for our integrated system.	
<b>MSW Land Disposal Facilities</b>	Support MPCA initiatives to document landfill air emissions and the long-term	Embark on a collaborative effort with neighboring counties on monitoring landfill	Organize and intensify publicity (at least once a year) on the reduction of waste types not suitable for RDF.

Management Area	Goals	Strategies	Programs
	impacts and costs of landfilling to support future policy decisions.	facilities and assessing future costs and impacts.	
		Encourage the MPCA to adopt a requirement for landfills and transfer stations to conduct waste characterization studies to identify opportunities to divert waste.	Support the MPCA to organize periodic assessments of the cost and benefits of diverting / delivering waste by the use of transfer stations. Engage the waste industry to improve waste diversion opportunities at waste facilities.
	Explore alternative means of reducing and disposing of waste not suited for RDF in order to discourage land disposal.	Identify and prioritize environmentally-friendly methods for the disposal of waste not suited for RDF.	Provide residents and businesses with educational materials on how to reduce sources of waste not suited for RDF.
			Conduct research on environmentally-friendly alternative disposal means for wastes not suitable for RDF.
<b>Solid Waste Tire Management Programs</b>	Reuse or recycle waste tire material into other useful products.	Promote existing tire collection options to residents and businesses.	Continue to identify and clean-up “clandestine” tire sites in rural areas if in existence.
			Organize County wide tire collections for each County at least once a year.
			Continue to make tire sales and service retail businesses major drop-off sites for waste tires.
	Enhance tire disposal education efforts.	Prevent waste tires from being illegally disposed of in woods, ditches, and other rural areas.	Work with interested private industries to research the feasibility of a facility for recycling or generating energy or fuels from waste tire materials.
Work with cities in the Tri-County to include tires in their public clean-up days.			
<b>Electronic Products</b>	Assure a clean and healthy environment by preventing the illegal disposal of electronics in lakes, woods, ditches, and other rural areas.	Educate students, residents and businesses on the benefits of the proper disposal of electronics.	Inform the public (through brochures and other print and electronic means) on the need to properly recycle electronic products.
	Comply with state laws on electronic products recycling and disposal.	Use enforcement tools to ensure proper disposal of electronic products.	Have list of licensed recycling options available to the public. Have day collections for electronics throughout Sibley, Le Sueur & Nicollet Counties as needed.

Management Area	Goals	Strategies	Programs
			Develop and periodically review enforcement tools on the disposal of electronic products in all counties.
<b>Major Appliance Management</b>	Assure a clean and healthy environment by preventing the illegal disposal of appliances in lakes, woods, ditches, and other rural areas.	Educate residents and businesses on the benefits of the proper recycling of appliances. Work with and inform Lake Association Groups of disposal options.	Develop and regularly promote appliance recycling opportunities to residents and businesses.
			Develop and distribute educational materials that describe the benefits from the proper recycling of appliances.
			Identify other appliance disposal options such as rural electric co-ops.
	Comply with state laws on appliance recycling and disposal.	Use enforcement tools to ensure proper recycling of appliances.	Develop a list of recyclers in the area who are licensed to process & handle appliances.
			Continue with organized waste collection drives, especially in the small cities and rural areas.
			Develop and periodically review enforcement tools on the recycling of appliances in the counties.
<b>Automotive Mercury Switches, Motor Vehicle Fluids And Filters, And Lead-Acid And Dry Cell Batteries</b>	Promote environmentally friendly and health-hazard free options for disposing automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries.	Provide residents and businesses with convenient collection points for the disposal of automotive mercury switches, motor vehicles fluids and filters, and lead-acid and dry cell batteries.	Establish and promote used oil and oil filter drop-off sites. Work with automotive service businesses to properly collect and dispose of used oil and filters.
			Continue to accept used oil, batteries, and mercury switches at all HHW collection sites and events. Promote take back programs such as used battery program.
	Comply with state laws regarding the disposal of automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries	Promote drop-off sites and ensure that automotive service businesses comply with regulations regarding the disposal of automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries.	Work with automotive service businesses to ensure that automotive mercury switches, motor vehicle fluids and filters, and lead acid and dry cell batteries are collected and disposed of in a manner that is compliant with state and federal regulations.
			Identify new opportunities for the collection of automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries.
	Prevent mercury from being disposed of in a manner that is		Establish and promote manned and/or unmanned drop-off sites for automotive batteries to encourage proper disposal.

Management Area	Goals	Strategies	Programs
		not environmentally friendly or conducive to public health.	Continue to provide public education (at least twice a year) on the proper disposal of mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries.
		Prevent batteries from being disposed of in a manner that is not environmentally friendly, is not conducive to public health, or precludes the possibility of proper recycling.	Educate the public on the dangers of the improper disposal of mercury and mercury spills.
<b>Household Hazardous Waste Management</b>	Improve on existing disposal opportunities for residents and businesses on proper disposal of HHW products.	Increase HHW disposal opportunities available	Continue to provide HHW collection to ensure residents have ample opportunities to properly dispose of HHW wastes.
			Promote the continued use of the Blue Earth County Regional HHW Facility, the McLeod County Household Hazardous Waste Facility and the Scott County Hazardous Waste Facility.
			Establish and promote HHW collection sites.
	Promote education on alternatives to HHW products and encourage separation and management of materials containing lead, mercury, and Polychlorinated biphenyls (PCBs) from the waste stream.	Encourage residents and businesses to properly separate and dispose of household and business hazardous waste products.	Establish a regular HHW collection drive, especially in the smaller cities and rural areas.
Provide residents with educational material on how to identify, reduce the use of, and properly handle & transport HHW products.			
<b>Demolition Debris</b>	Identify and promote to residents and businesses environmentally friendly alternatives to common HHW products. Educate HHW users of take back programs such as the new Paint legislation.		Design and implement a program to reward businesses that don't sell products containing lead, mercury, or PCBs.
	Provide residents and businesses with opportunities for the disposal of demolition debris.	Encourage residents to properly dispose of demolition debris.	Educate residents and businesses of demolition drop off sites. Educate construction contractors of asphalt shingle recycling / grinding options in the area.
	Ensure that contractors abide by state and federal regulations regarding the	Educate contractors on state and federal regulations regarding the proper disposal of	Host an annual educational forum with contractors and MPCA staff to ensure that contractors are aware of state and federal regulations on the proper disposal of demolition debris.

Management Area	Goals	Strategies	Programs
	disposal of demolition debris. Also educate contractors on the practice of recycling asphalt shingles.	demolition debris.	Develop and periodically review enforcement tools on the disposal of demolition debris in the counties.
<b>On-site and Illegal Disposal</b>	Increase participation of rural residents in the waste management system.	Educate residents of other options and remove barriers for self-haulers. Conduct Pilot Projects of drop-off sheds located at rural Township Halls.	Inform rural residents and businesses of what is already working in rural areas such as the Granby/ Nicollet Township solid waste and recycling contract for both Township residents. Establish regularly scheduled drop-off times at rural drop off facilities and reduce disposal fees for self-haulers. Promote Rural Ag Bag collection sites.
	Use enforcement to discourage illegal dumping practices, especially in lakes, woods, ditches, and other rural areas.	Provide opportunities and incentives for rural residents to properly dispose of toxic waste products.	Expand disposal options, through either manned or unmanned drop-off sites throughout the county.
			Provide educational materials to residents and businesses that emphasize the environmental and health risks associated with on-site disposal. Distribute "Burn Barrels Brochures".
Use enforcement tools to further discourage illegal disposal practices.			

### 1.5.1 Budget

The existing solid waste management programs are financed through the County Solid Waste budgets and the Tri-County Solid Waste Office budget. Yard waste composting is managed at the municipal level. Recycling collection is managed at the municipal level through drop-off sites or hauler collection contracts. The Tri-County contracts for the processing and marketing of recyclables for Le Sueur and Sibley Counties. The following table projects the individual county and Tri-County Solid Waste Office budgets for the next ten years. These budget projections are estimates that are subject to change depending on legislative mandates, SCORE funding, special assessment tax revenues and program cost. The projections are also subject to the prevailing inflation rate. An assumed inflation rate of 2.4% was used for the projections. Appendix 2 shows the detailed budget outline for the entire plan period (using 2011 budget as the base year).

Table 1.4: Summary of Anticipated Solid Waste Budgets

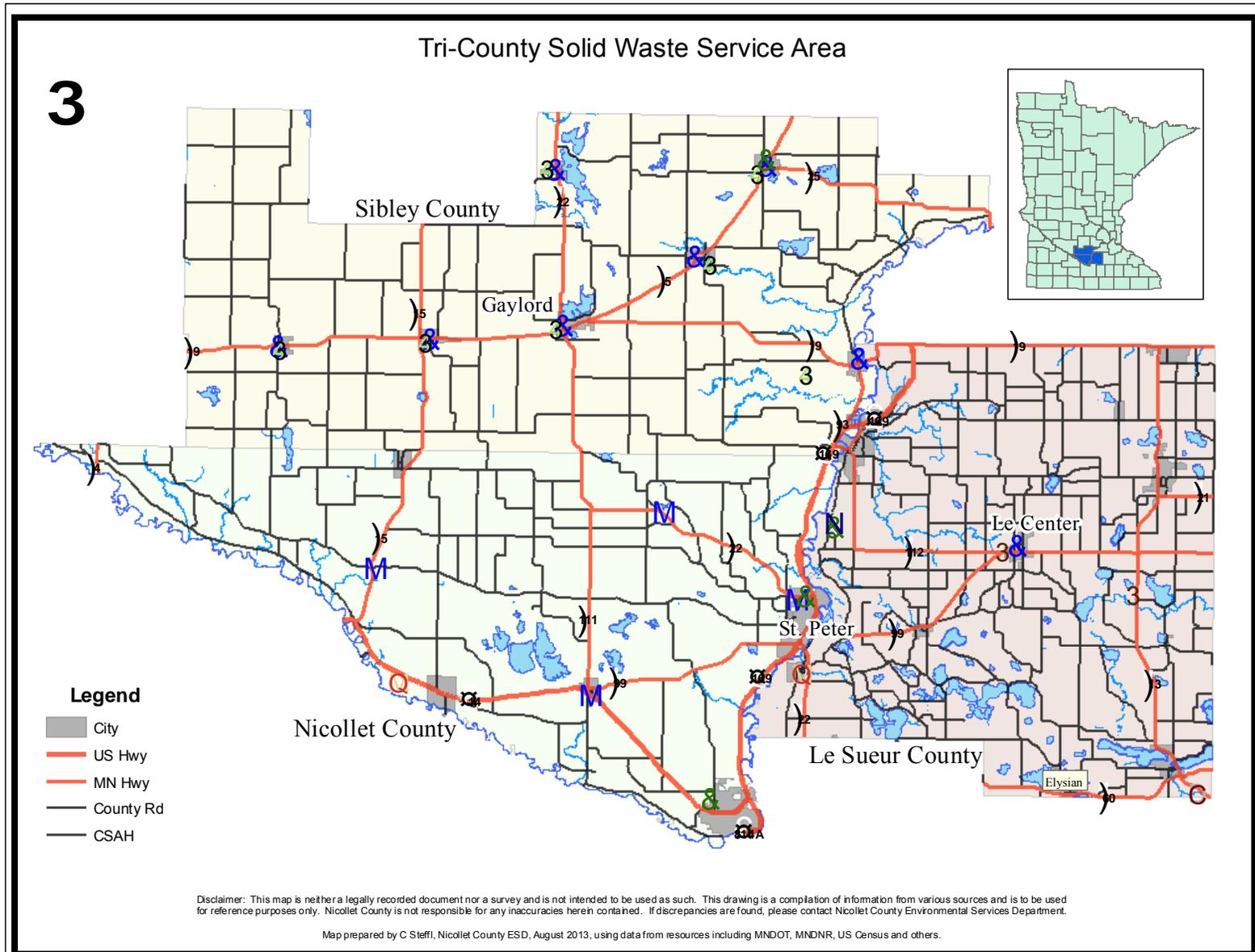
County	Estimated Annual Budget (\$)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Tri-Co. SW Off.	283,344	289,501	296,125	303,058	310,004	317,444	325,063	332,864	340,853	349,033
Le Sueur	262,871	269,180	275,641	282,256	289,030	295,967	303,070	310,344	317,792	325,419
Nicollet	357,793	366,380	375,173	384,177	393,398	402,839	412,507	422,407	432,545	442,926
Sibley	214,304	219,447	224,714	230,107	235,630	241,285	247,076	253,006	259,078	265,296

## **CHAPTER TWO – BACKGROUND INFORMATION OF COUNTIES**

### **2.1 INTRODUCTION**

This chapter is in two phases- all focused on providing a background of Le Sueur, Sibley and Nicollet Counties. Phase one describes basic demographic, economic, housing, land use and prevailing economic conditions of the Counties. The section concludes with a summary of challenges and opportunities that this background profile presents to these counties in terms of solid waste management. The second phase also discusses background information of the three counties but the discussion is focused on solid waste generation and management. This phase presents basic data on waste generation and management in the three counties. The entire chapter is concluded with a review of solid waste management efforts of The Tri-County Solid Waste Joint Powers Board.

Figure 2.1: Tri-County Solid Waste Service Area



## **2.2 GEOPHYSICAL CHARACTERISTICS OF COUNTIES**

This section discusses the distinguishing geographical characteristics of each County within the Tri-County. The characteristics of each of these Counties are discussed with respect to: location, size and transportation; vegetation, topography, and hydrography; and land use/cover and development trends.

### **2.2.1 Counties' Location, Size and Transportation**

#### ***Le Sueur***

Occupying 448.5 square miles of land, Le Sueur County is approximately 40 miles south-southwest of the City of St. Paul, Minnesota's State capital. It is comprised of 7 incorporated cities, most of 2 other incorporated cities, a large part of a third incorporated city, and 14 townships. The County is bounded on the north by Scott County, on the west by Sibley and Nicollet Counties, on the south by Blue Earth and Waseca Counties, and on the east by Rice County (see Figure 2.2). US Highway 169, passing through the City of Le Sueur runs along the County's western boundary.

#### ***Nicollet***

Nicollet County is located in south central Minnesota and is adjacent to the counties of Blue Earth, Brown, Le Sueur, Renville and Sibley (Figure 2.3). The County is made of 5 cities and 13 townships. The 13 townships form a triangular shape with 104.6 miles of the Minnesota River forming the southeast and southwest boundaries. A line of forested bluffs separate the river valley from land that is relatively flat and historically used for agricultural purposes. The County encompasses a total of 439 square miles, approximately 383 square miles of that are actively farmed. There are many transportation routes within the County, including US Highway 169 that runs along the eastern boundary through the Cities of North Mankato and St. Peter.

#### ***Sibley***

Sibley County is located approximately 50 miles southwest of the Twin Cities and encompasses an area of 600 square miles with 12 square miles of this being water. Sibley is home to 7 cities and 17 townships. The County's northern boundary is shared with McLeod and Carver Counties, southern boundary is shared with Nicollet County, Le Sueur and Scott Counties are to the County's eastern boundary, and Renville County bounds the County's western boundary (Figure 2.4). The County has a large farming population as well as complementing agri-businesses such as food processing, ethanol processing and a fertilizer plant. Having US Highways 212 and 169 at the northern and eastern borders of the County respectively supports the agricultural and agri-business sectors of the County's economy.

Figure 2.2: Map of Le Sueur County

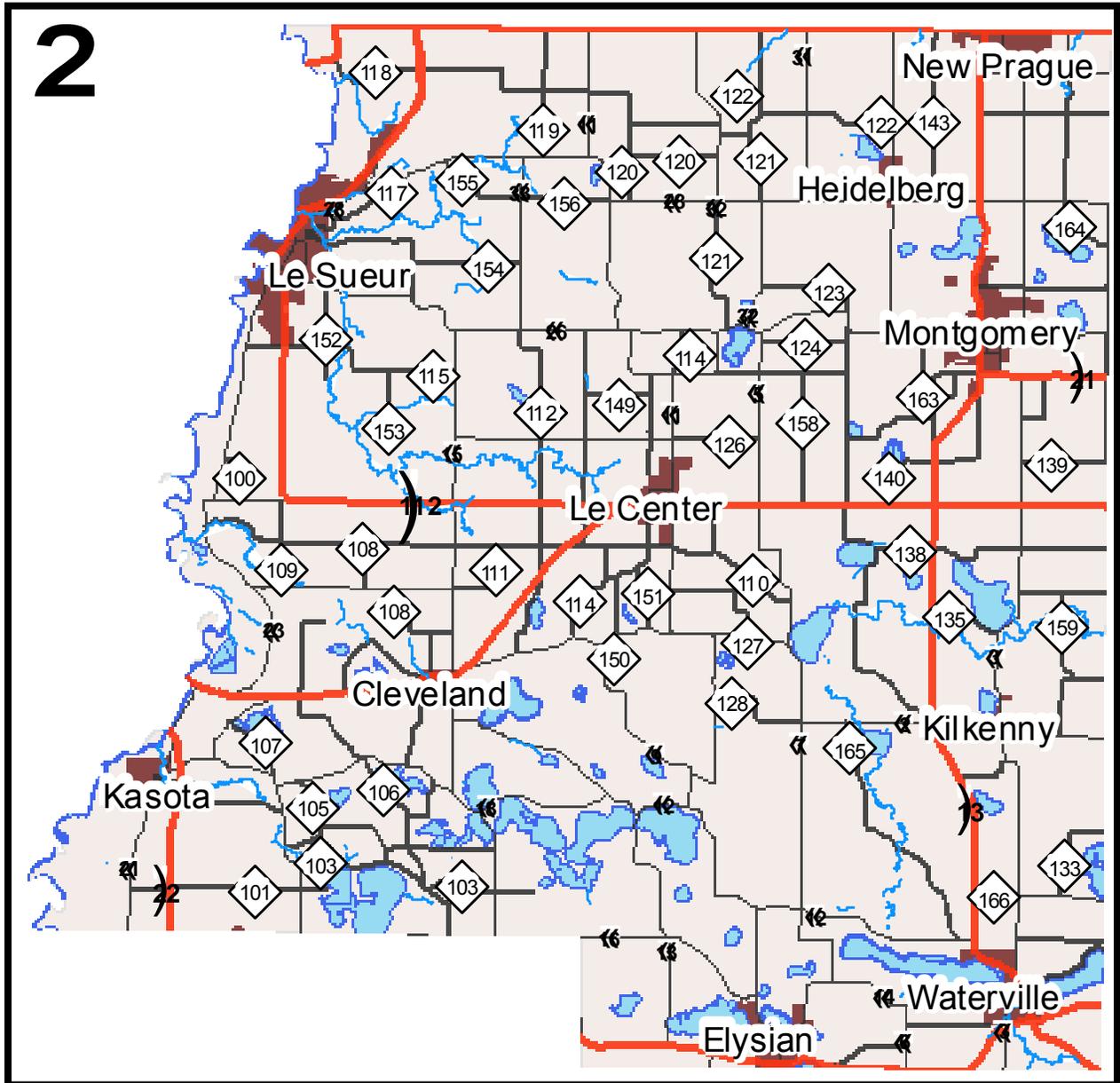
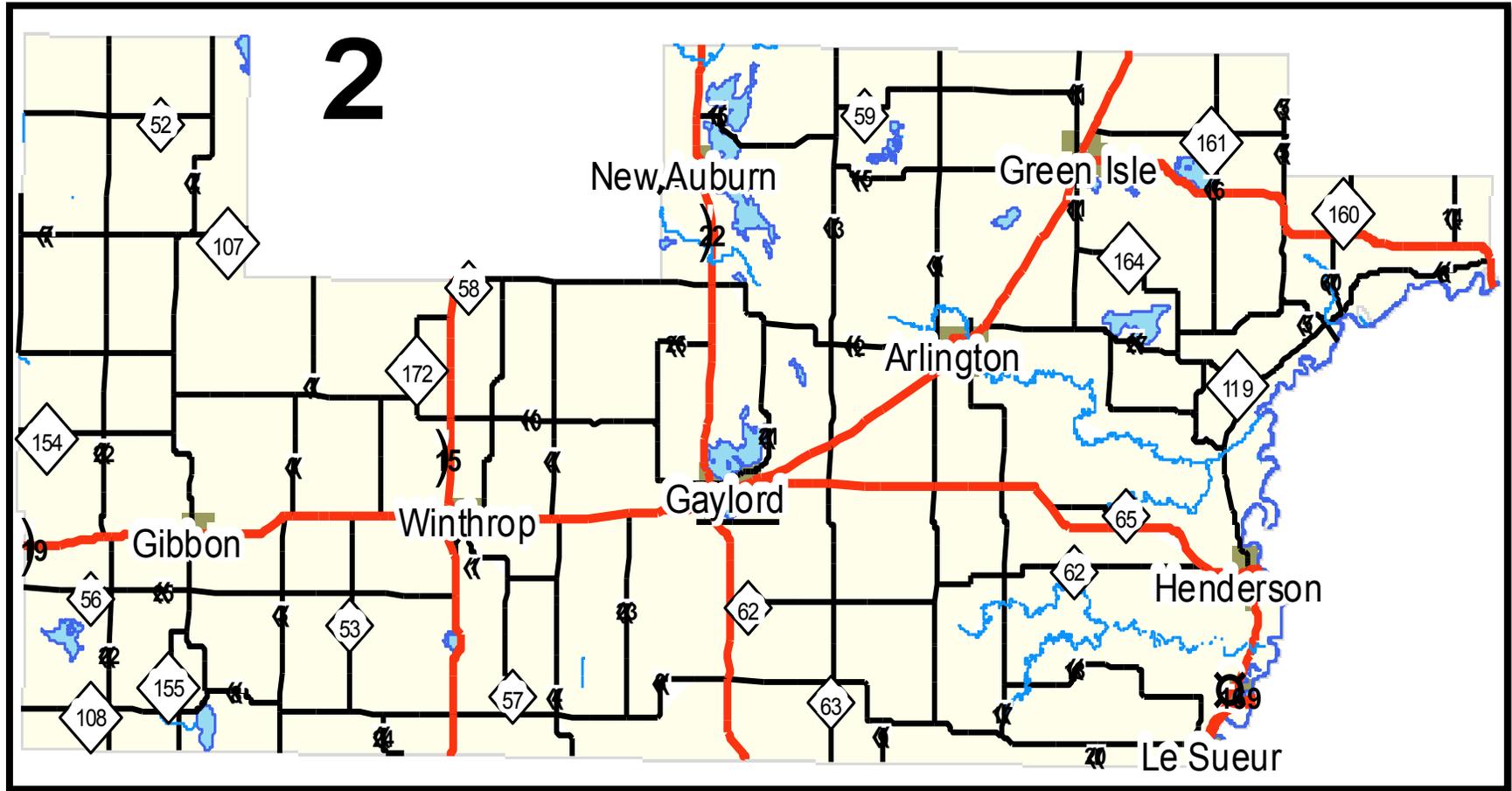


Figure 2.3: Map of Nicollet County with all major road networks



Figure 2.4: Map of Sibley County

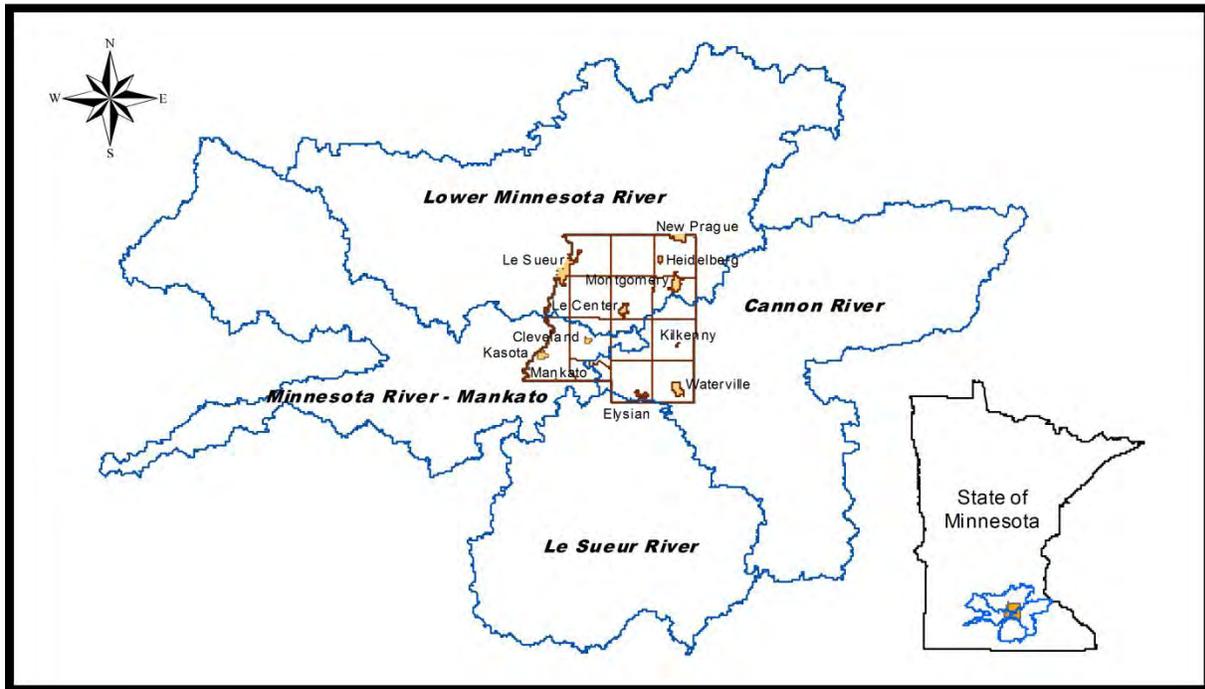


## 2.2.2 Vegetation, Topography, and Hydrography of Counties\*

### *Le Sueur*

The predominant original vegetation of Le Sueur County was dense hardwood forest interspersed with areas of wet marshes, sloughs or wet meadows. The sandy or bedrock terraces along the Minnesota River were dominated by prairie grasses. Le Sueur County has immature surface drainage networks which are typical of recently glaciated landscapes. Much of the farmland in the County is artificially drained by ditches and tiles that eventually empty into natural creeks. The Minnesota River drains about three-fourths of the County (see Figure 2.5). Its principal tributaries are Cherry, Forest Prairie, Le Sueur, Sand, and Shanaska Creeks. The remainder of the County, the southeastern part, drains through the Big and Little Cannon Rivers through Tetonka and Sakatah Lakes and empties into the Mississippi River.

Figure 2.5: Watersheds in Le Sueur County Area



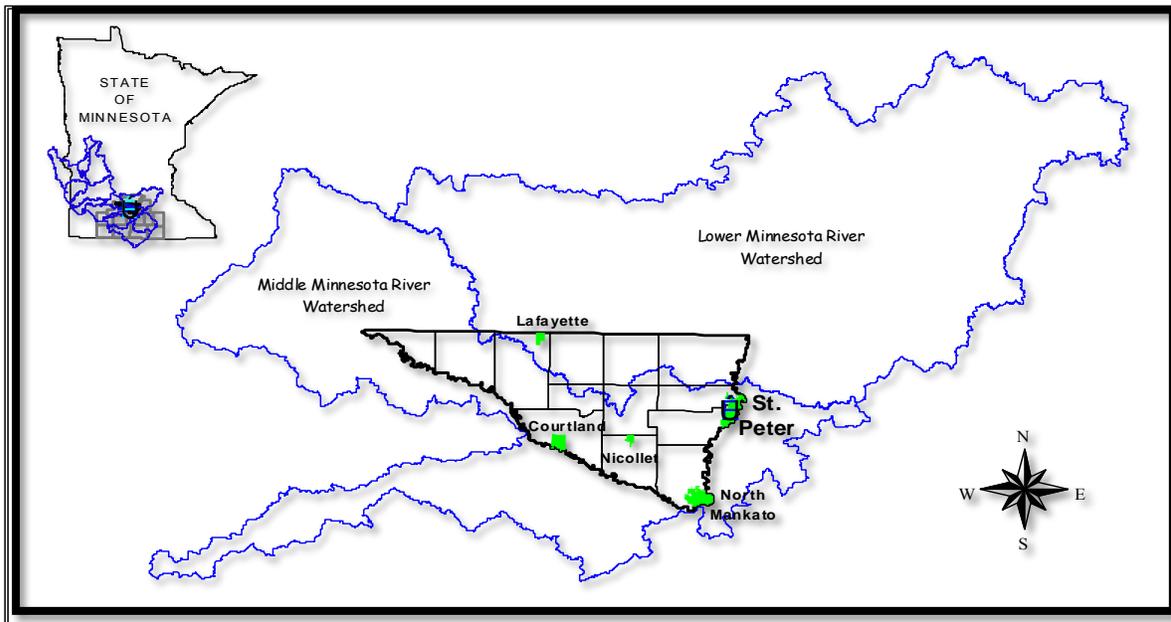
Relief in the County is characteristic of that in a glaciated area. The elevation of the till plain ranges from 940 to about 1,020 feet above sea level. In the moraine area the hills and ridges rise 50 to 150 feet above the swales and drainageways. The highest elevation in the County, about 1,180 feet, is in the southern morainic area. The lowest elevation, about 720 feet, is in an area in the northwest corner where the Minnesota River leaves the County.

\* Information on this section were either provided by County staff (in the case of Nicollet County), or extracted and edited from the recent counties'; Comprehensive Land Use Plans, and Comprehensive Local Water Plans (in the case of Le Sueur and Sibley Counties).

## **Nicollet**

The surface of Nicollet County is a former prairie/grassland that was converted for the purposes of agricultural production. Agriculture includes row crops of corn and soybeans as well as pastures. The County is located within the Middle and Lower Minnesota River watersheds. The majority of the surface drainage flows south towards the Minnesota River, which drains to the north eventually emptying into the Mississippi River. The northern portion of the County is in the Lower Minnesota River watershed and drains northeast into the Rush River, connecting to the Minnesota River (Figure 2.6).

Figure 2.6: Watersheds in Nicollet County Area



The majority of the land in Nicollet County consists of glacial till plain characterized by nearly level or gently rolling prairie uplands. Along the Minnesota River, there is a continuous strip of bottomland separated from the prairie uplands by very steep slopes. The maximum difference in elevations within the County is about 300 feet. The highest elevations are found northwest of Swan Lake. Although the uplands are relatively level, the western portion of the County tends to be slightly higher than the eastern areas.

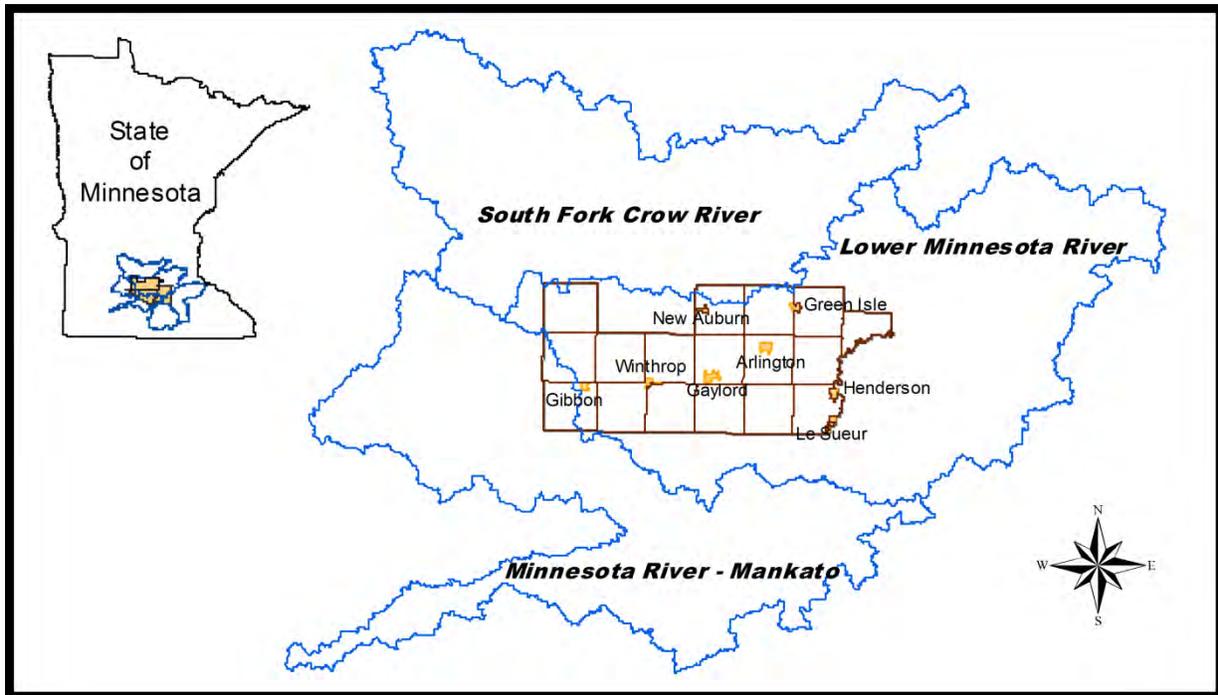
## **Sibley**

Sibley County's pre-settlement vegetation was tall and medium prairie grasses in the west and central part of the county, which formed the deep, dark, surface soils that make an excellent medium for agriculture in the county. The eastern part of the county included oak savanna, brush, and deciduous forests prior to settlement, some of which remains today, particularly along rivers and streams. While agriculture lands dominate about 90 percent†

† 2007 Census of Agriculture by the United States Department of Agriculture (USDA);  
[http://www.agcensus.usda.gov/Publications/2007/Online\\_Highlights/County\\_Profiles/Minnesota/cp27143.pdf](http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Minnesota/cp27143.pdf)

of the land uses in the county, there are a number of natural resource features associated with wetlands, creeks, streams, rivers, lakes, woodlands and forests, and prairies throughout the county. The Minnesota River Valley (see Figure 2.7), with its mostly wooded, steep slopes and ravines provides the most dramatic landscape in Sibley County. In the southeastern part of the county, a nearly level lake plain joins adjacent Lake Prairie Township in neighboring Nicollet County.

Figure 2.7: Watersheds in Sibley County Area



Sibley County is located in an area of Minnesota with relatively flat to rolling terrain. The Soil Survey of Sibley County,<sup>1</sup> Minnesota reports the highest elevation as 1,085 feet found in Grafton Township in the northwestern portion of the county. The lowest elevation in the county is 700 feet and is at that point where the Minnesota River leaves Sibley County along the northeastern border of the County. The landscape is a nearly level to gently sloping till plain (95 percent of slopes between 0-6% slopes) with local relief of 3-10 feet. The southern and south-central parts of the county have a gently sloping and sloping till plain with local relief of 10-30 feet.

## 2.2.3 Land Use/Cover and Development Trends<sup>‡</sup>

### *Le Sueur*

According to the 2007 Le Sueur County Land Use Plan<sup>2</sup>, the County is seeing growth pressures that are pushing out from urban employment centers. From Table 2.1, approximately two-thirds (69.5%) of the County's land area constitute the cultivated land area (see Figure 2.8 of land use/cover map). The recent growth pressures that were identified in the 2007 land use plan will mean the encroachment on the County's cultivated and other conservation land areas if proper measures are not in place. The 2007 plan echoed the concerns of the County residents regarding how the growth may impact on the quality of life and possibly contribute to the degradation of the environment.

Table 2.1: Le Sueur County Land Use/Cover Statistics<sup>3</sup>

Description	Acreage	Percent of Total
Cultivated land	210,725	69.5
Hay/pasture/grassland	32,736	10.8
Forested	26,972	8.9
Water	14,499	4.8
Urban and rural development	10,940	3.6
Bog/marsh/fen	5,584	1.8
Mining	950	0.3
Brushland	612	0.2
<b>Total</b>	<b>303,018</b>	<b>100</b>

### *Nicollet*

Land use in Nicollet County is predominantly agriculture. Over 78% of the county is cultivated land (see Table 2.2 and Figure 2.9). Nicollet County's Comprehensive Land Use Plan places a priority on maintaining the agricultural setting of the non-urban areas. Industrial development exists primarily in the cities of North Mankato and St. Peter. Other land use within the County includes woodlands (9%) and hay/pasture/grassland, brushland, water or bog/marsh/fen (10% total). There is a small amount of land in the county dedicated to mining.

Table 2.2: Nicollet County Land Use/Cover Statistics<sup>4</sup>

Description	Acreage	Percent of Total
Cultivated land	234,452	78.5
Forested	25,574	8.6
Hay/pasture/grassland	13,749	4.6
Urban & Rural development	9,194	3.1
Water	7,815	2.6
Bog/marsh/fen	6,941	2.3
Mining	490	0.2
Brushland	316	0.1
<b>Total</b>	<b>298,531</b>	<b>100</b>

<sup>‡</sup> The land use and cover statistics and maps are based on the 1990 Census of Land by the MN Dept. of Administration / Office of Geographic and Demographic Analysis / [MnGeo](#)

## **Sibley**

The agrarian nature of Sibley County is manifested by the vast proportion of its land area (84.3%) under cultivation (shown in Table 2.3 and Figure 2.10). Only about 2.4% of its land area is developed (classified as “Urban and rural development” in Table 2.3). However, after comparing land cover information and recent aerial photographs, the County’s 2009 Comprehensive Plan<sup>5</sup> points out that “some residential development is expanding into forest and agricultural areas, especially in the eastern portions of the County or those areas with access to major transportation corridors”. Although the growth trend is consistent with the existing zoning ordinance, the Plan indicates that continued growth pattern may lead to “a sprawling and inefficient development patterns”.

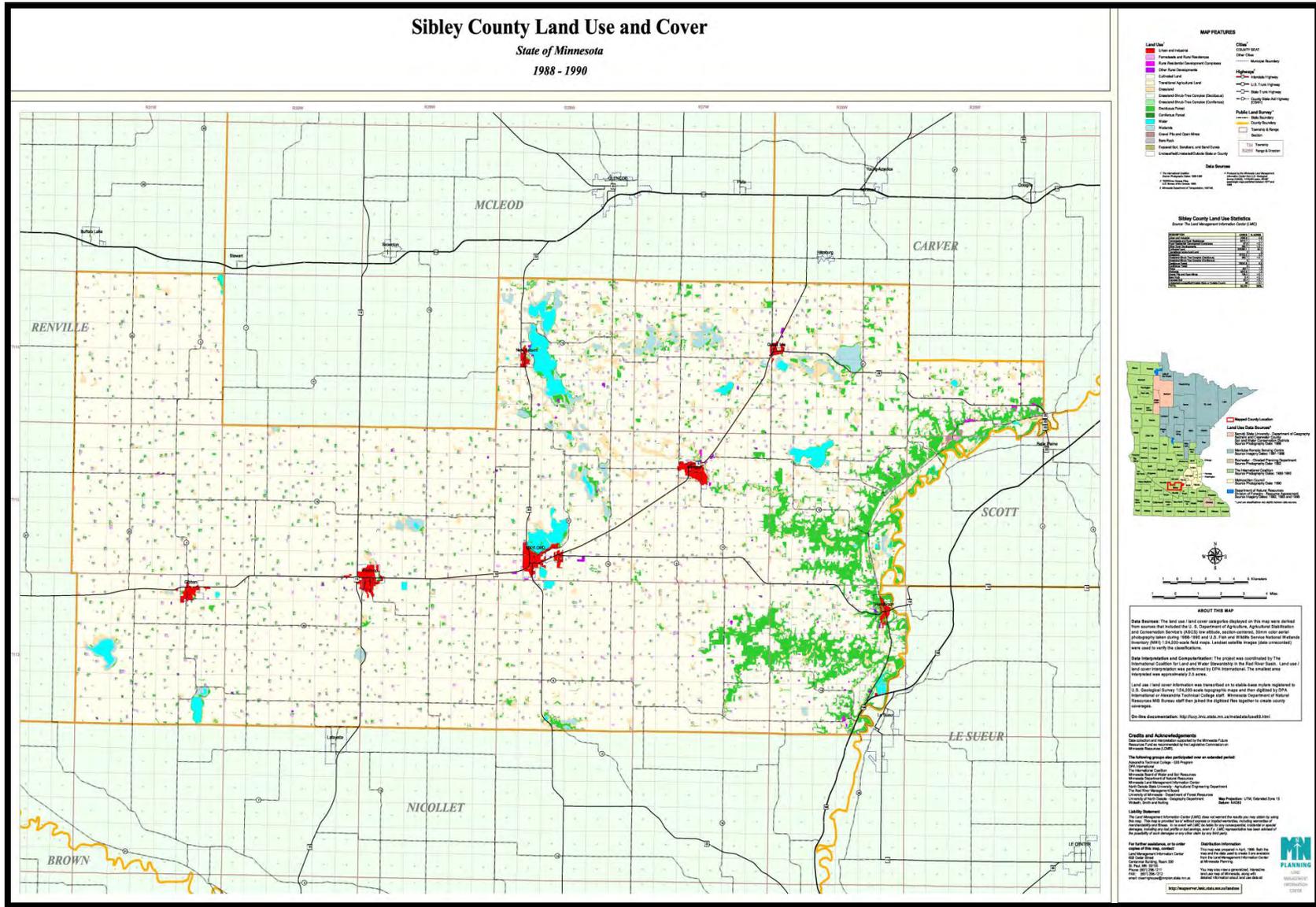
Table 2.3: Nicollet County Land Use/Cover Statistics<sup>6</sup>

<b>Description</b>	<b>Acreage</b>	<b>Percent of Total</b>
Cultivated land	323,867	84.3
Forested	24,777	6.5
Hay/pasture/grassland	16,098	4.2
Urban and rural development	9,096	2.4
Water	4,968	1.3
Bog/marsh/fen	4,801	1.2
Brushland	369	0.1
Mining	162	0
<b>Total</b>	<b>384,138</b>	<b>100</b>





Figure 2.10: Map of Existing Land Uses - Sibley County



## 2.3 DEMOGRAPHICS

### 2.3.1 Population and Household Characteristics of Counties

With the exception of Sibley County, the two remaining counties in the Tri-County have experienced significant population increases over the past five decades (summarized in Table 2.4). The US Census Bureau in 2011 estimated the populations of Le Sueur, Nicollet and Sibley Counties respectively as 27,754 (representing 39 per cent increase from 1960), 32,471 (an increase of 40 per cent from 1960) and 15,219 (representing 6 per cent decrease from 1960). All three counties have however experienced consistent and perceptible increases in the number of households since 1990. As of 2011, the majority of population for both males and females are within the 45-49 age cohorts for Le Sueur and Sibley Counties and 20-24 for Nicollet County (see Figures 2.11, 2.12 and 2.13 for the 2011 population structure of both counties). Nicollet County with its significantly high population also has the most youthful population as of 2011.

Table 2.4: Past Population and Household Trends for Le Sueur, Nicollet and Sibley Counties

Category	County	1960	1970	1980	1990	2000	2010	2011
Population	<i>Le Sueur</i>	19,906	21,332	23,434	23,239	25,426	27,703	27,703
	<i>Nicollet</i>	23,196	24,518	26,929	28,076	29,771	32,727	32,769
	<i>Sibley</i>	16,228	15,845	15,448	14,366	15,356	15,226	15,220
Household	<i>Le Sueur</i>	N/A	N/A	N/A	8,451	9,630	10,758	10,907
	<i>Nicollet</i>	N/A	N/A	N/A	9,548	10,642	12,201	13,375
	<i>Sibley</i>	N/A	N/A	N/A	5,317	5,772	6,034	6,137

Figure 2.11: Population of Le Sueur County (2011)

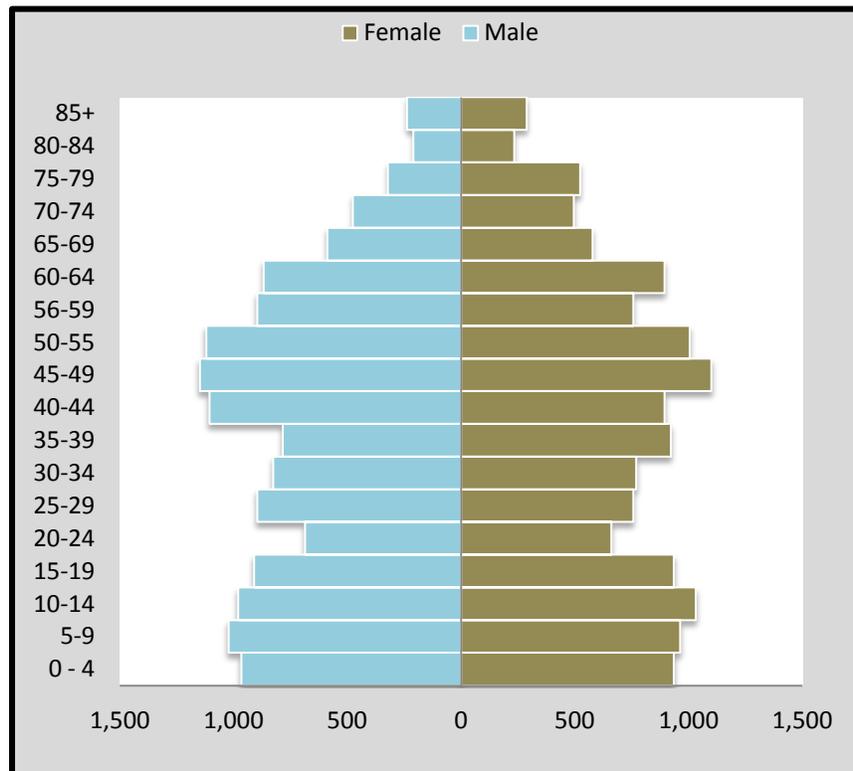


Figure 2.12: Population of Nicollet County (2011)

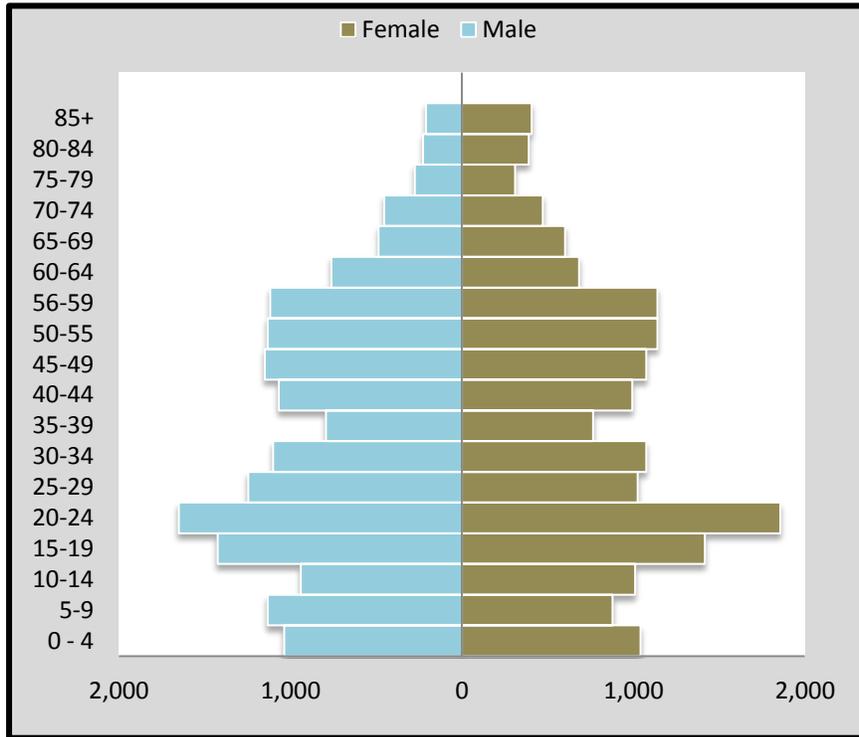
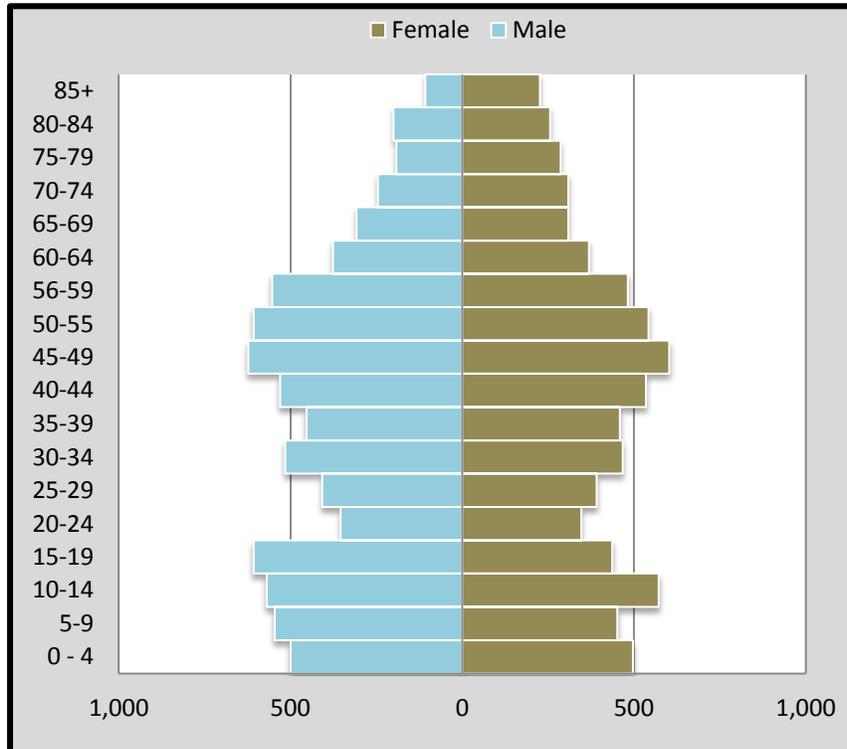


Figure 2.13: Population of Sibley County (2011)



### 2.3.2 Population Distribution among Cities and Townships<sup>7</sup>

A quick look at Tables 2.5, 2.6, and 2.7 show that all three Counties have more than half of their population distributed in cities. Approximately 82 per cent, 60 per cent and 56 percent of the populations in Nicollet, Le Sueur and Sibley Counties respectively live in cities. Generally, only 8 out of the 22 cities (36%) in the Tri-County experienced population decline between 2000 and 2011. While population in all cities in Nicollet County increased between 2000 and 2011, only 2 out of the 7 cities in Sibley County experienced an increase in their population. Population in the townships generally declined or experience negligible growths between 2000 and 2011. Only 10 out of the 44 townships (26 percent) recorded growth between 2000 and 2011 and 6 of these townships are within Le Sueur County.

Table 2.5: Population Distribution – Le Sueur County

City	Population			Township	Population		
	2000	2011	% Change		2000	2011	% Change
Cleveland	673	672	-0.1%	Cleveland	615	638	3.7%
Elysian	486	422	-13.2%	Cordova	517	549	6.2%
Heidelberg	72	123	70.8%	Derrynane	549	492	-10.4%
Kasota	680	819	20.4%	Elysian	985	924	-6.2%
Kilkenny	148	384	159.5%	Kasota	1487	1,575	5.9%
Le Center	2240	2,431	8.5%	Kilkenny	393	365	-7.1%
Le Sueur	3919	4,084	4.2%	Lanesburgh	2074	2,020	-2.6%
Montgomery	2794	3,013	7.8%	Lexington	763	813	6.6%
New Prague	1402	2,905	107.2%	Montgomery	745	567	-23.9%
Waterville	1833	1,808	-1.4%	Ottawa	290	281	-3.1%
				Sharon	658	797	21.1%
				Tyrone	564	619	9.8%
				Washington	797	738	-7.4%
				Waterville	742	715	-3.6%

Table 2.6: Population Distribution –Nicollet County

City	Population			Township	Population		
	2000	2011	% Change		2000	2011	% Change
Courtland	538	608	13.0%	Belgrade	1033	1,140	10.4%
Lafayette	529	577	9.1%	Bernadotte	346	189	-45.4%
Nicollet	889	1,200	35.0%	Brighton	169	146	-13.6%
North Mankato	11798	13,258	12.4%	Courtland	715	596	-16.6%
St. Peter	9761	11,089	13.6%	Granby	259	219	-15.4%
				Lafayette	724	701	-3.2%
				Lake Prairie	638	639	0.2%
				New Sweden	326	344	5.5%
				Nicollet	511	398	-22.1%
				Oshawa	525	509	-3.0%

City	Population			Township	Population		
	2000	2011	% Change		2000	2011	% Change
				Ridgely	126	79	-37.3%
				Traverse	367	328	-10.6%
				West Newton	517	428	-17.2%

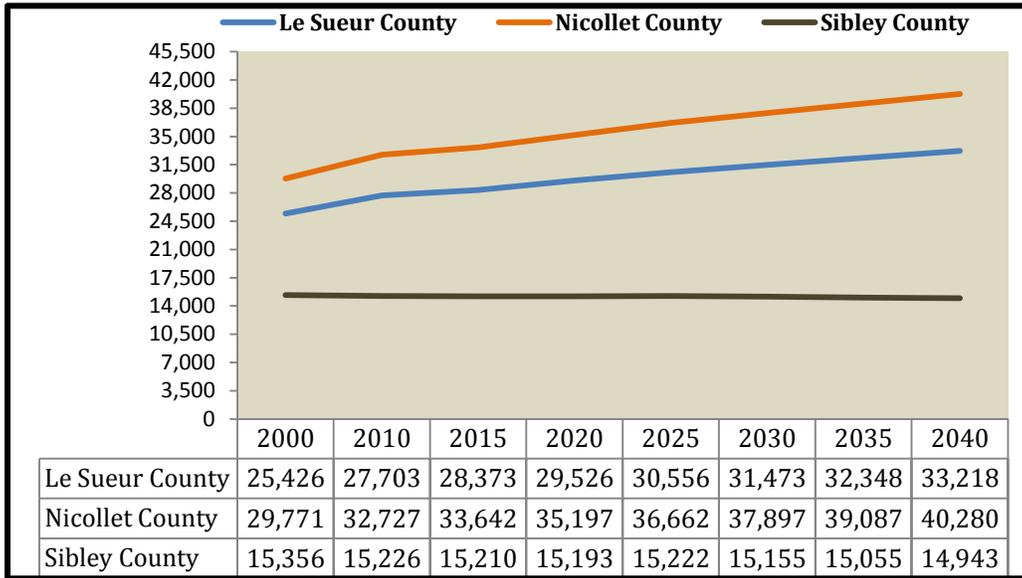
Table 2.7: Population Distribution –Sibley County

City	Population			Township	Population		
	2000	2011	% Change		2000	2011	% Change
Arlington	2048	2,569	25.4%	Alfsborg	356	328	-0.1
Gaylord	2279	2,219	-2.6%	Arlington	562	620	0.1
Gibbon	808	749	-7.3%	Bismarck	376	290	-0.2
Green Isle	334	303	-9.3%	Cornish	267	205	-0.2
Henderson	910	814	-10.5%	Dryden	280	288	0.0
New Auburn	488	577	18.2%	Faxon	598	607	0.0
Winthrop	1367	1333	-2.5%	Grafton	259	221	-0.1
				Green Isle	556	636	0.1
				Henderson	700	684	0.0
				Jessenland	481	390	-0.2
				Kelso	357	337	-0.1
				Moltke	337	274	-0.2
				New Auburn	464	414	-0.1
				Severance	343	245	-0.3
				Sibley	353	296	-0.2
				Transit	324	312	0.0
				Washington Lake	506	508	0.0

### 2.3.3 Population Projections of Counties

As shown in Figure 2.14, MN State Demographers predict population increases for Le Sueur and Nicollet Counties over the next two decades. That of Sibley is expected to decrease. Le Sueur and Nicollet Counties are anticipated to grow by 10 per cent and 12 per cent respectively by 2025, with Sibley decreasing by an insignificant rate. These growth rates were used in the GVT in estimating the future solid waste generation and recycling rates.

Figure 2.14: Population Projection of Counties

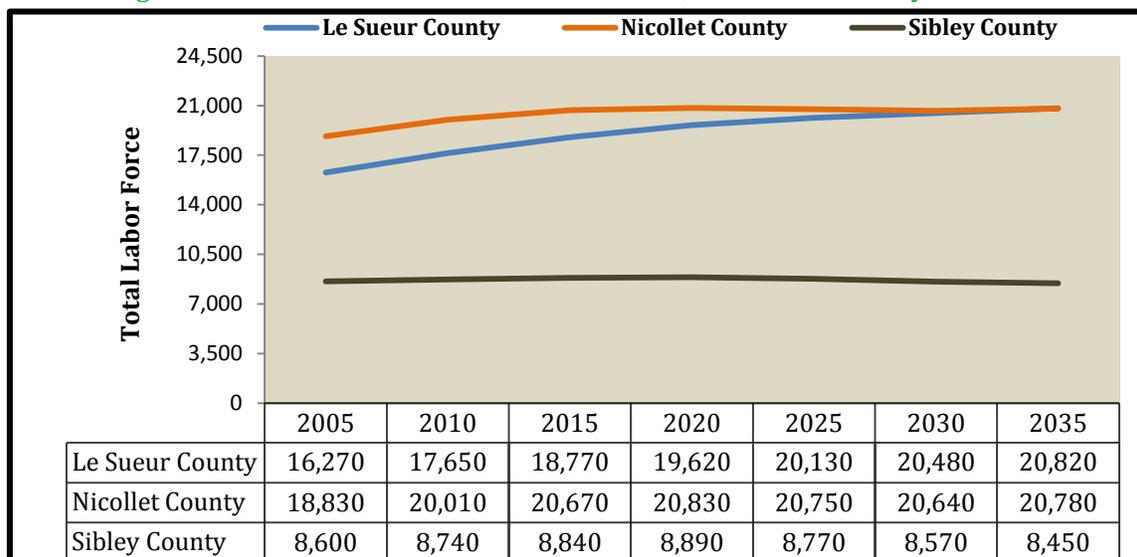


## 2.4 LOCAL ECONOMIC CONDITION

### 2.4.1 Labor force outlook for the Tri-County<sup>8</sup>

Figure 2.15 shows that by 2035, Le Sueur and Nicollet Counties are expected to have increases in their labor force population by 18% and 3.8% respectively. Sibley is expected to record a decrease of 3.3%. Unanimously, the labor force in the 65+ age cohort is expected to increase by 128%, 105%, and 86% for Le Sueur, Nicollet and Sibley Counties respectively. All the labor force cohorts in Le Sueur County are expected to increase by an average of 11% by 2035, that of Nicollet County (except for the 25-44 age cohort) will decrease by an average of 5.5%, and the entire labor force cohorts for Sibley County will also decrease by an average of 10.8%.

Figure 2.15: Labor Force Outlook for Le Sueur, Nicollet and Sibley Counties



## 2.4.2 Employments, Wages and Incomes of Counties

Le Sueur and Nicollet Counties as well as the Region and State experienced declines in the annual average employment between 2000 and 2011 (shown in Table 2.8). Employment in South-west Minnesota is however expected to increase by 10.4 per cent by the year 2020 (indicated in Table 2.9). Significant in these employment projections is how the various industries are expected to grow. The expected growths of these industries are taken into account in formulating goals and programs to tackle waste management issues in the Tri-County service area.

The US Census Bureau's statistics in 2011 shows that the average weekly wage for Nicollet County in 2011 was higher than that of Le Sueur and Sibley Counties as well as that recorded in the region. However, as shown in Table 2.10, the Bureau's estimates in 2011 also indicate slightly higher per capita incomes for residents in Le Sueur County over those in Nicollet County. Approximately 9.2 per cent, 11.3 per cent and 12.1 per cent of residents in Le Sueur, Nicollet and Sibley Counties respectively had incomes below the poverty level. These percentages were higher than Minnesota's average of 7.1 per cent (based on the US Census Bureau's estimates for 2011).

The distribution of income among the residents is considered in ensuring equitable pricing of waste among residents in all three Counties. The volume-based pricing promoted by both Counties and the Tri-County Board in hauling solid waste is one of such means of ensuring such equity-based pricing. Solid waste pricing reviews that will be considered throughout this planning period will look at such equity issues.

Table 2.8: Employment and Wages of Counties<sup>9</sup>

Jurisdiction	Year	Avg. Annual Employment	Total Wages	Av. Weekly Wage
Le Sueur County	2000	9,216	\$223,354,359	\$466
	2005	7,995	\$220,290,771	\$530
	2011	7,374	\$245,339,891	\$639
Nicollet County	2000	14,140	\$367,308,635	\$500
	2005	14,304	\$415,979,073	\$559
	2011	13,313	\$469,926,907	\$678
Sibley County	2000	4,062	\$86,004,760	\$408
	2005	4,296	\$110,851,265	\$496
	2011	4,319	\$136,289,558	\$606
Region Nine	2000	100,995	\$3,476,937,263	\$482
	2005	103,885	\$3,079,938,339	\$570
	2011	103,240	\$3,476,937,263	\$661
MN	2000	2,608,844	\$92,436,655,611	\$681
	2005	2,637,323	\$107,714,426,206	\$785
	2011	2,603,459	\$124,596,558,565	\$920

Table 2.9: Median Household and Per Capita Incomes (2011)

County	Median Household Income	Per Capita Income
Le Sueur	58,074	26,481
Nicollet	59,877	26,108
Sibley	52,482	24,563

Table 2.10: Employment Projections by Industry in South-west Minnesota <sup>10</sup>

Occupation	Employment		Change	
	Estimated 2010	Projected 2020	%	Numeric
Transportation and Material Moving	14,686	16,777	14.2%	2,091
Production	21,053	22,858	8.6%	1,805
Installation, Maintenance, and Repair	8,138	9,051	11.2%	913
Construction and Extraction	8,062	9,790	21.4%	1,728
Farming, Fishing, and Forestry	4,019	4,586	14.1%	567
Office and Administrative Support	25,045	26,664	6.5%	1,619
Sales and Related	18,835	20,305	7.8%	1,470
Personal Care and Service	9,183	11,774	28.2%	2,591
Building and Grounds Cleaning and Maintenance	6,723	7,348	9.3%	625
Food Preparation and Serving Related	14,886	15,533	4.3%	647
Protective Service	2,502	2,519	0.7%	17
Healthcare Support	9,938	13,312	34%	3,374
Healthcare Practitioners and Technical	9,679	11,447	18.3%	1,768
Arts, Design, Entertainment, Sports, &Media	2,838	3,036	7%	198
Education, Training, and Library	11,376	11,411	0.3%	35
Legal	716	793	10.8%	77
Community and Social Service	4,605	5,186	12.6%	581
Life, Physical, and Social Science	1,553	1,696	9.2%	143
Architecture and Engineering	2,349	2,473	5.3%	124
Computer and Mathematical	1,380	1,451	5.1%	71
Business and Financial Operations	7,314	8,178	11.8%	864
Management	21,459	21,528	0.3%	69
<b>Total</b>	<b>206,339</b>	<b>227,716</b>	<b>10.4%</b>	<b>21,377</b>

### 2.4.3 Housing Situation

Between 2000 and 2011, the number of occupied housing units has increased by 13.5 per cent, 15 per cent and 5.7 per cent for Le Sueur, Nicollet and Sibley Counties respectively (see Tables 2.11 2.12, and 2.13). There are declines in homeowner and rental vacancy rates in 2011 compared to 2010. The low vacancy rates for homeowners compared to renters in all three Counties suggest more favorable housing conditions for homeowners as against renters. Projections made and solid waste programs developed in this plan takes into account the household solid waste needs for both homeowners and renters.

Table 2.11: Housing Situation in Le Sueur County

Characteristics	2000	2005-2009	2006-2010	2007-2011
Occupied housing units	9,630	10706	10,758	10,938
Vacant housing units	1,228	1695	1,658	1,464
Population in owner-occupied housing units	21,634	23,724	23,040	23,235

Characteristics	2000	2005-2009	2006-2010	2007-2011
Population in renter-occupied housing units	3,499	3,484	4,393	4,235
Homeowner vacancy rate (percent)	0.9	-	2.1	1.6
Rental vacancy rate (percent)	3.8	-	10.5	5.6
Average household size of owner-occupied units	2.7	2.6	2.59	2.56

Table 2.12: Housing Situation in Nicollet County

Characteristics	2000	2005-2009	2006-2010	2007-2011
Occupied housing units	10,642	12,079	12,201	12,247
Vacant housing units	598	595	672	613
Population in owner-occupied housing units	21,939	23,288	23,345	23,338
Population in renter-occupied housing units	5,280	6,498	6,662	6,843
Homeowner vacancy rate (percent)	1.2	-	1.8	0.6
Rental vacancy rate (percent)	8.7	-	7.3	3.7
Average household size of owner-occupied units	2.72	2.64	2.6	2.58

Table 2.13: Housing Situation in Sibley County

Characteristics	2000	2005-2009	2006-2010	2007-2011
Occupied housing units	5,772	6,040	6,034	6,103
Vacant housing units	252	402	548	454
Population in owner-occupied housing units	12,580	12,021	12,495	12,089
Population in renter-occupied housing units	2,452	2,980	2,501	2,663
Homeowner vacancy rate (percent)	1.3	-	1.9	1.4
Rental vacancy rate (percent)	4.6	-	11	6.4
Average household size of owner-occupied units	2.69	2.49	2.55	2.45

## 2.5 SUMMARY OF DEMOGRAPHIC, LAND USE AND ECONOMIC CONSTRAINTS AND OPPORTUNITIES

The constraints and opportunities presented here relate to the geophysical, demographic housing and local economic characteristics of Le Sueur, Nicollet and Sibley Counties and their impacts on the counties' solid waste system. The background characteristics as earlier discussed in this Chapter present very few constraints toward the existing or proposed.

Any effort for regional solid waste planning and management would likely include Blue Earth, McLeod, Carver and Scott Counties due to their proximity to the Tri-County. Also, the Tri-County collaborates with Ramsey and Washington Counties in solid waste management efforts.

It is anticipated that, Le Sueur and Nicollet Counties will continue to experience population growth and will need to accommodate solid waste management services for this growth. Notwithstanding the constraint that population increase may present to these Counties, it also decreases the solid waste cost per person or household. Future cost in managing solid

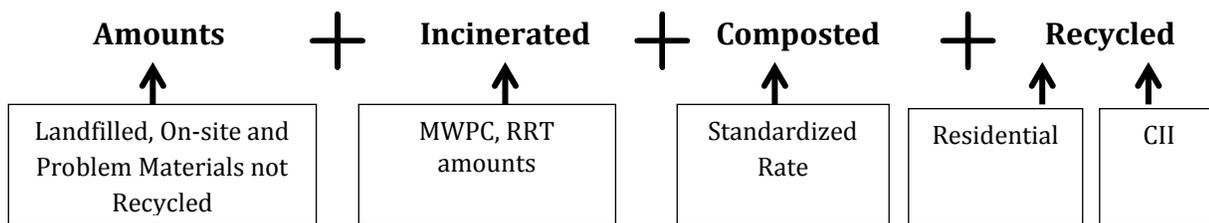
waste in these two Counties would have to be borne by a larger population which reduces the cost per household.

Finally, the current local economy of these three counties, which is a mix of agriculture and locally based businesses, also serves as an opportunity for the Tri-County. This type of foundation provides a buffer to market extremes as they are often complementary to one another in job growth, for example. In addition, certain businesses in the Tri-County have helped to grow the economy by implementing recycling into their business model.

## 2.6. SOLID WASTE GENERATION AND MANAGEMENT

Solid waste generation is the sum of the total waste disposed, incinerated, composted and recycled, as illustrated in Figure 2.16. Problem materials that are not recycled are included in the amount disposed category. The overall solid waste stream can be subdivided into various sectors. For the purposes of this Plan, the Tri-County solid waste stream will be divided into: 1) Residential; and 2) Commercial, Industrial and Institutional (CII) sectors. The waste stream will be broken into these two sub-streams to estimate the overall solid waste generation and per capita generation rates.

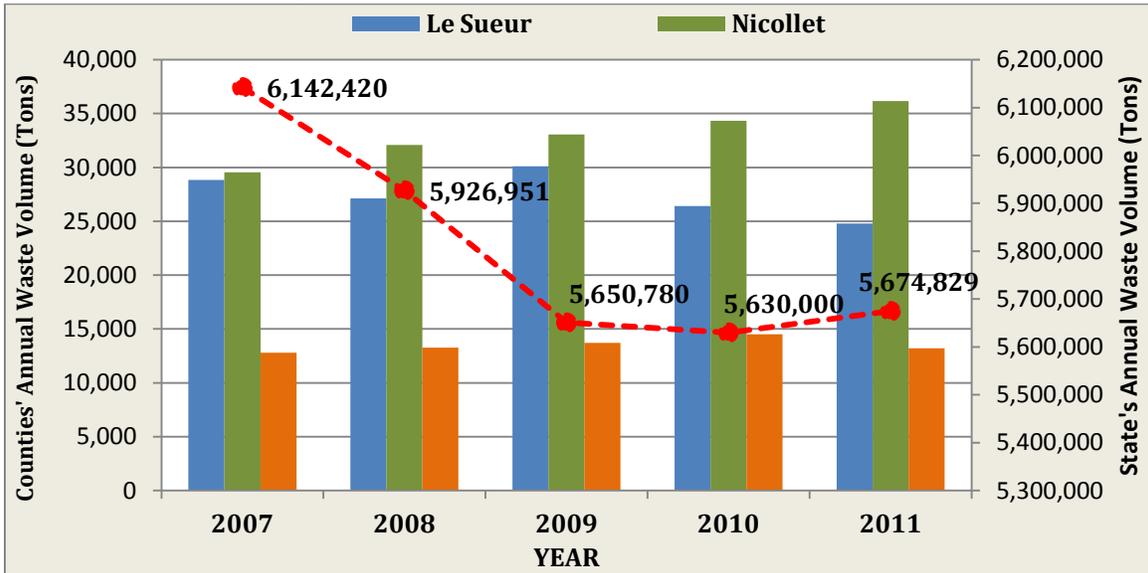
Figure 2.16: Solid Waste Generating Formula



### 2.6.1 Waste Generated

Each year the Tri-County Solid Waste Office surveys commercial haulers and area businesses to obtain information on the amount of materials recycled and the disposal information of municipal solid waste generated in each county. These figures are then reported to the Minnesota Pollution Control Agency on the county's annual SCORE report. Figure 2.17 shows the trend of solid waste for Le Sueur, Nicollet and Sibley Counties as well as that of the State.

Figure 2.17: Annual Waste Generated by Counties



The total Municipal Solid Waste (MSW) generated in the Tri-County in 2011 (the base year), as calculated by the GVTs, was 74,127 tons. Table 2.14 summarizes this information for the year 2011. Tri-County staff estimates that approximately 1,323 tons per year are managed on-site averaged over the three Counties, based on current population estimates. This amount is included in the on-site disposal quantity in the GVTs. The remaining solid waste generated but not collected is attributed to that managed by individual homeowners on-site. This number reflects information collected on previous surveys and is an estimate.

Table 2.14: Solid Waste Collection/Disposal Information (in tons) for 2011

County	MSW <sup>1</sup>		Recycling Collected		Estimated MSW Not Collected & Problem Materials	Total tons Solid Waste Generated
	Tons Landfilled	MSW Processed	Tons of Recycling	Recycling % of Solid Waste		
Le Sueur	6,586	6,955	9,678	39%	1,559	24,778
Nicollet	7,413	9,621	17,232	48%	1,888	36,155
Sibley	5,572	774	6,103	46%	746	13,194

<sup>1</sup>MSW includes material land-filled and processed

## 2.7 SOLID WASTE COMPOSITION

In the 2001 Solid Waste Plan for the Tri-County, the composition of waste stream was estimated using the Greater Minnesota data from the 2000 Minnesota Statewide MSW Composition Study by the Solid Waste Management Coordinating Board (SWMCB). Since this 2000 study is the only current study of such nature, the waste composition section of this plan relies on the data presented in this study.

The aggregate results from the rural (non-metropolitan) disposal sites that participated in the 2000 Study were used to estimate Tri-County's waste composition. A total of three facilities were selected to represent Greater Minnesota. The three solid waste facilities whose waste sort data was used to represent Greater Minnesota in the 2000

Study included:

- ❖ Polk County’s Waste-to-Energy facility in Fosston, MN;
- ❖ Prairieland MSW Compost Facility in Truman, MN; and
- ❖ St. Louis County’s Landfill in Virginia, MN.

The field sort data for 140 samples originating from residential, CII, and mixed waste loads from the participating facilities were used in calculating the results. The Project Team’s analysis of Greater Minnesota was performed using the same aggregation methodology as with the Metropolitan Region. Tables 2.15 through 2.17 present the data from the sample facilities. The results of Greater Minnesota’s MSW composition are summarized in Figure 2.18 and Table 2.18 provides the details.

Table 2.15: Greater Minnesota Sampling Summary

Facility	Residential Samples	CII Samples	Mixed Waste Samples	Total Samples
Polk County WTE	9	4	37	50
Prairieland MSW Composting	7	14	19	40 <sup>1</sup>
St. Louis County Landfill	11	9	30	50
<b>Total</b>	<b>27</b>	<b>27</b>	<b>86</b>	<b>140</b>

Note: <sup>(1)</sup>Represents one sample from each MSW Commercial hauling vehicle using the facility during the sorting event.

Table 2.16: Greater Minnesota Weighting Factors by Facility

Facility	Estimated Tons Disposed (1999)	Weighting Factor
Polk County WTE	30,400	31.4%
Prairieland MSW Composting	16,900	17.5%
St. Louis County Landfill	49,500	51.1%
<b>Total</b>	<b>96,800</b>	<b>100%</b>

Table 2.17: Greater Minnesota Reported Composition of Mixed Loads

Facility	Average Composition	
	Residential	ICI
Polk County WTE	55.8%	44.2%
Prairieland MSW	48.1%	51.9%
St. Louis County Landfill	67.4%	32.6%
AVERAGE (not weighted)	57.4%	42.6%

Note: The total/subtotal may not equal the sum of the material categories due to rounding.

Figure 2.18: Summary of Greater Minnesota MSW Composition

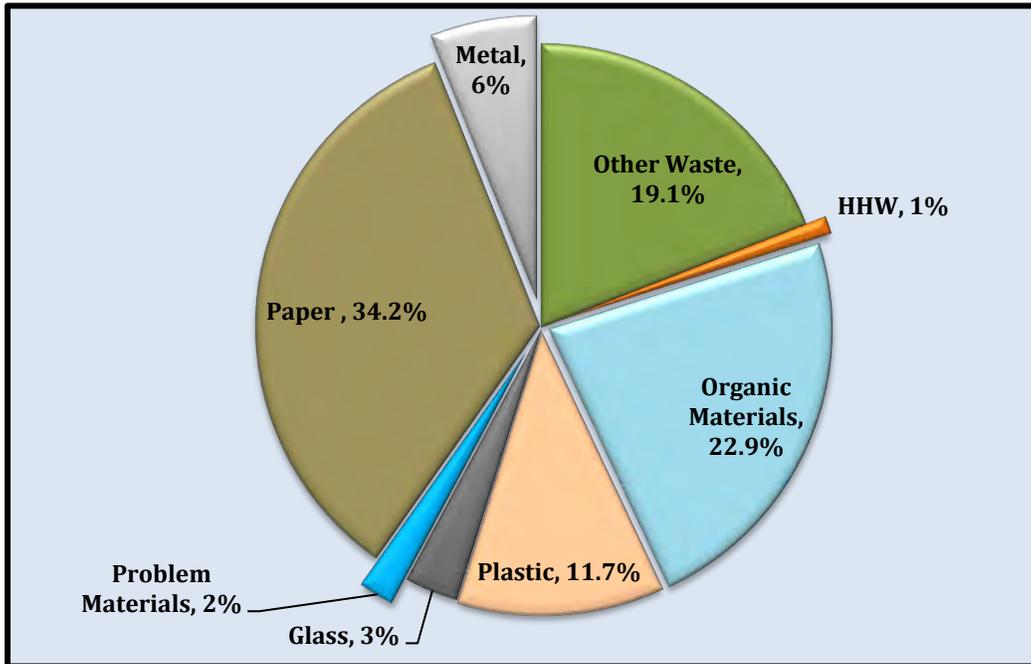


Table 2.18: Greater Minnesota MSW Composition<sup>11</sup> - Estimates of Materials in MSW (by weight)

Material	Material Categories	Average Composition
Paper	Newsprint (ONP)	4.30%
	High Grade Office	3.1
	Magazines/Catalogs	2.7
	Uncoated OCC - recyclable	4.6
	Uncoated OCC - nonrecyclable	0.5
	Coated OCC	0.3
	Boxboard	2.8
	Mixed Paper - recyclable	5.3
	Mixed Paper - nonrecyclable	10.8
	<b>Total Paper</b>	<b>34.2%</b>
	Plastic	PET Bottles/Jars - clear
PET Bottles/Jars - colored		0.4
Other PET		0
HDPE Bottles - natural		0.3
HDPE Bottles - colored		0.3
PVC		0.1
Polystyrene		0.9
Film - transport packaging		0.2
Other Film		4.4
Other Containers		0.5
Other non-containers		4.2
<b>Total Plastic</b>		<b>11.7%</b>
Metals		Aluminum Beverage Containers
	Other Aluminum	0.5
	Ferrous Containers	1.3
	Other Ferrous	3.3
	Other Non-Ferrous	0.1

<b>Material</b>	<b>Material Categories</b>	<b>Average Composition</b>
	<b>Total Metals</b>	<b>6%</b>
<b>Glass</b>	Clear Containers	1.60%
	Green Containers	0.4
	Brown Containers	0.5
	Other Glass	0.5
	<b>Total Glass</b>	<b>3%</b>
<b>Organic Materials</b>	Yard Waste – Grass & Leaves	1.70%
	Yard Waste – woody material	0.1
	Food Waste	14.5
	Wood Pallets	0.4
	Treated Wood	1.6
	Untreated Wood	1.1
	Diapers	2.7
	Other Organic Material	0.9
	<b>Total Organic Materials</b>	<b>22.9%</b>
<b>Problem Materials</b>	Televisions	0.00%
	Computer Monitors	0
	Computer Equipment/Peripherals	0
	Electric & Electronic Products	1.9
	Batteries	0.1
	Other	0
	<b>Total Problem Materials</b>	<b>2%</b>
<b>HHW</b>	Latex Paint	0.00%
	Oil Paint	0.1
	Unused Pesti/Fungi/Herbicide	0
	Unused Cleaners & Solvents	0
	Compressed Fuel Containers	0
	Automotive – Antifreeze	0
	Automotive – Used oil filters	0.1
	Other	0.6
	<b>Total HHW</b>	<b>1%</b>
<b>Other Waste</b>	Textiles	3.40%
	Carpet	1.5
	Sharps & Infectious Waste	0
	Rubber	0.7
	Construction & Demolition Debris	3.2
	Household Bulky Items	2.9
	Empty HHW Containers	0.7
	Miscellaneous	6.7
	<b>Total Other Waste</b>	<b>19.1%</b>
<b>TOTAL</b>		<b>100%</b>

The Greater Minnesota results from the 2000 Study were used as a basis for characterizing the Tri-County waste stream. The results of the waste characterization study only reflect the quantity of materials that were discarded. Therefore, the quantities of materials diverted from disposal must be added to the materials discarded to derive a total waste composition generation estimate. The resulting characterization was reasonable based

upon the types of generators within the Tri-County. However, it should be noted that the accuracy of the characterization is limited and an actual County waste audit should be conducted to enhance the accuracy of the waste characterization prior to any facility implementation.

## 2.8 WASTE COLLECTION AND DISPOSAL INFORMATION

Residents in the Tri-County service area have access to some form of solid waste disposal service. Table 2.19 indicates all facilities located within the Tri-County service area. Section 3.4.2 under Chapter 3 presents the location of all facilities, both within and outside of the Tri-County service area. Residents can either utilize a collection service or if that option is not available, self-haul to a solid waste facility. However, it is estimated that approximately nine percent, eight percent and seven per cent residents in Le Sueur, Nicollet and Sibley Counties respectively do not use these collection services. These respectively equate to approximately 1039 tons, 1,102 tons and 1160 tons of solid waste each year that is buried or burned. This calculation is found in the Goal-Volume Tables and is based on a generation rate of 2.3 pounds of solid waste per person, per day for Le Sueur and Nicollet Counties and 2.4 pounds for Sibley County. Residents located within the municipalities in the Tri-County service area have collection services with commercial haulers. This is equal to approximately 87% of residents with access to a collection service.

Table 2.19: Solid Waste Facilities in the Tri-County Service Area

County	Name of Facility	Address	City	Waste Service Provided
Le Sueur	City of Le Center	180 S Lexington	Le Center	Recycle
	Waste Management of MN	37701 Ottawa Rd	Le Sueur	Private Recycling Company
	Selly Excavating, Inc	525 W Derrynane St	Le Center	Bituminous & Concrete
	Fessel's Wood Recycling LLC	51608 State Highway 13	Waterville	Wood Recycling
	Hansen Recycling & Transfer Station	686 W Pearl St	Kasota	Demo Disposal
	Waste Management of MN	37701 Ottawa Rd	Le Sueur	Transfer Station
	Barnett Brothers, Inc	41375 State Hwy 13	Kilkenny	Bituminous & Concrete
Nicollet	Farmers Co-Op Of Lafayette	37597 State Highway 22	Norseland	Rural Drop Box
	Nicollet (County Of)	1700 Sunrise Dr	St Peter	Rural Drop Box
	Nicollet (County Of)	805 Main St	Nicollet	Rural Drop Box
	Nicollet (County Of)	57575 Fort Rd	New Ulm	Rural Drop Box
	Valley Demo,	Rural Route, off of State Hwy 14	New Ulm, MN	Demo Disposal
	LJP Enterprises of North Mankato LLC	2160 Ringhofer Dr	N Mankato	Private Recycling Company
	LJP Enterprises St Peter Ll	1720 N Gault	St Peter	Private Recycling Company
	Riverbend Recycling Center	600 Webster Avenue	N Mankato	County/City Recycling Center

County	Name of Facility	Address	City	Waste Service Provided
Sibley	Winthrop	2 N Main St	Winthrop	Recycle
	Winthrop	103 S Main St	Winthrop	Yard Waste
	New Auburn	8402 4th St	New Auburn	Recycle
	New Auburn	48250 190th St	New Auburn	Yard Waste
	Henderson	405 Market St	Henderson	Recycle
	Henderson	300th St S	Henderson	Yard Waste
	Gibbon	975 1st Ave	Gibbon	Recycle
	Gibbon	490 Mill Rd	Gibbon	Yard Waste
	Arlington	102 4th Ave SW	Arlington	Recycle
	Arlington	Freedom Drive	Arlington	Yard Waste
	Green Isle	190 Parnell St	Green Isle	Recycle
	Green Isle	19065 371st Ave	Green Isle	Yard Waste
	RSI Recycling	425 5th St	Green Isle	Private Recycling Company
	Gaylord	510 Sibley Ave	Gaylord	Recycle
	Gaylord	19 6th St	Gaylord	Yard Waste
	R & R Metal Salvage	17896 State Highway 5 & 25	Green Isle	Metal Waste

### 2.8.1 Current Collection and Disposal Rates

Refuse collection rates represent the range of rates across the Tri-County. Residential rates vary according to the type of collection system. Some cities offer various garbage cart / bag sizes while other cities only have a per bag fee. It should also be noted that some of the fees listed include separate City taxes and or solid waste taxes while other fee structures may not include additional taxes as that information is City and waste hauler contract specific.

#### A. Residential

Most of the incorporated cities in the Tri-County have organized collection programs for solid waste and recycling services. Tables 2.20, 2.21 and 2.22 indicate the municipal refuse collection programs by city, their contracted hauler and the pricing system used in Le Sueur, Nicollet and Sibley Counties.

Table 2.20: Le Sueur County Municipal Refuse Collection Programs

City	Hauler	Pricing System
City of Waterville	Waste Management	\$5.46 – 35 gallon \$8.74 – 64 gallon \$10.92 – 96 gallon \$3.50 for curbside recycling per month
City of New Prague	Lakers Sanitation	\$1.00 – 20 gallon bag \$1.81 – 33 gallon bag \$5.50/month on utility bill for recycling
City of Le Center	The City is a Self Hauler with	\$2.25 for a 25 gallon

City	Hauler	Pricing System
	its own truck.	\$3.00 for a 40 gallon \$5.00 per household on utility bill for recycling per month
City of Le Sueur	Waste Management	\$12.35 for a 35 gallon \$18.61 for a 64 gallon \$21.88 for a 96 gallon No recycling fee City wide clean up in spring and fall
City of Elysian	Waste Management	\$12.00 for a 35 gallon \$15.96 for a 64 gallon \$19.37 for a 96 gallon \$3.50 for curbside recycling per month.
City of Cleveland	Waste Management	\$1.60 - 30 gallon \$3.94 for Curbside collection \$2.24 per month recycling fee per month
City of Montgomery	Waste Management	\$10.63 for a 32 gallon \$15.13 for a 64 gallon \$16.36 for a 96 gallon \$3.38 for curbside recycling per month

Table 2.21: Nicollet County Municipal Refuse Collection Programs

City	Hauler	Pricing System (rates are per month)
City of Courtland	LJP Enterprises Waste & Recycling, LLC	\$12.50 – 35 gallon container \$15.25 – 64 gallon container \$18.00 – 96 gallon container \$3.10 for curbside recycling
City of Lafayette	Waste Management	\$10.13 – 35 gallon container \$13.13 – 64 gallon container \$16.14 – 96 gallon container \$3.29 for curbside recycling
City of Nicollet	LJP Enterprises Waste & Recycling, LLC	\$9.73 – 35 gallon container \$12.73 – 64 gallon container \$15.73 – 96 gallon container \$3.25 for curbside recycling
City of North Mankato	Hansen Sanitation, Inc.	\$7.60 per household or \$5.96 for senior citizens \$3.27 for curbside recycling \$3.10 for Spring & Fall cleanups
City of St. Peter	Waste Management	\$21.23 – 60 gallon container \$24.22 – 90 gallon container \$26.08 – 10, 15 gallon bags (includes service and bag fee) \$31.67 – 10, 30 gallon bags (includes service and bag fee) All rates include curbside recycling

Table 2.22: Sibley County Municipal Refuse Collection Programs

City	Hauler	Pricing System
City of Gaylord	Gaylord Sanitation	\$12.65 for a 35 gallon \$15.15 for a 64 gallon \$17.78 for a 96 gallon Prices include recycling & taxes
City of Henderson	Elite Waste Disposal	\$5.65 – 32 gallon \$6.65 – 64 gallon \$7.65 – 96 gallon \$3.75 for curbside recycling per month
City of Winthrop	Gaylord Sanitation	\$11.43 for a 35 gallon \$12.04 for a 64 gallon \$14.78 for a 96 gallon \$2.50 for curbside recycling per month
City of Gibbon	Gaylord Sanitation	\$11.15 for a 35 gallon \$13.15 for a 64 gallon \$15.90 for a 96 gallon \$4.15 monthly bag fee \$2.80 for curbside recycling per month
City of Arlington	Waste Management, Gaylord Sanitation Renville Sibley Sanitation	No organized collection. Rate varies per hauler per service at residence
City of Green Isle	Waste Management	\$7.86 for a 35 gallon \$8.95 for a 64 gallon \$10.05 for a 96 gallon \$2.79 for curbside recycling per month
City of New Auburn	Gaylord Sanitation, Renville Sibley Sanitation	No organized collection. Rate varies per hauler and per service at residence.

**B. Commercial**

Waste from businesses is collected by haulers who typically use a volume-based rate per cubic yard and is determined on the number of pick-ups required per month, the size of the container and the distance to the tipping or transfer facility. The remainder of business and commercial solid waste is hauled by the individual businesses.

Because the Tri-County does not control pricing for commercial waste generation, it is not possible to offer financial incentives for solid waste abatement to businesses. There is, however, incentive for waste abatement through rising costs of waste disposal at all levels of the waste removal process. Tri-County can provide technical assistance to businesses on waste issues, including waste audits when requested.

**C. Construction and Demolition Debris Generation**

Generally, the amount of construction and demolition (C&D) debris in the waste stream varies considerably over time because the quantities disposed are directly influenced by the economy and the scope of residential and commercial building activities.

Presently, there are four (4) facilities C&D disposal sites located directly in the Tri County area and three more facilities located outside the Tri County area but are still frequently used by residents and businesses.

1. Hansen Recycling & Transfer Station, 686 W. Pearl Street, Kasota, MN
2. Valley Demo, Rural Route, off of State Hwy 14, New Ulm, MN
3. LJP Enterprises Transfer Station, 2160 Ringhofer Drive, North Mankato, MN.
4. Waste Management Transfer Station, 4 mile south of Le Sueur, Le Sueur, MN

C & D Facilities located outside the Tri County area but still used heavily by Tri County residents and businesses.

1. SMC Demo, 57032 231<sup>st</sup> Lane, Mankato, MN
2. Spruce Ridge Resource Facility, 12755 137<sup>th</sup> Street, Glencoe, MN
3. Dem Con, 13020 Dem Con Drive, Shakopee, MN

All the above mentioned facilities are privately owned and operated.

The following table is demolition and construction tonnages for the base year of 2011 and a projection of future Cubic Yards.

**Table 2.23 Demolition & Construction Debris in Cubic Yards**

County	2011	2013	2014	2015	2016	2017
Nicollet County	4140	4240	4495	4600	4850	5005
Sibley County	2396	2415	2320	2330	2280	2230
Le Sueur County	4650	5480	5325	4540	4480	4535

***D. Major Solid Waste Generators in the Tri County area***

Major solid waste generators in Le Sueur County include: Seneca Foods (food waste) – 3,155 tons, United Steel (metals) – 711 tons, USP Connectors (packaging waste & metals) - 676 tons and Davisco Foods (food waste) - 250 tons.

Major solid waste generators in Nicollet County include: Taylor Corporation (paper and packaging waste) – 1,275 tons, Gustavus Adolphus College (food and paper waste) – 260 tons, Precision Press (metals) – 1,301 tons, MICO (metals) - 302 tons, and Alumacraft (metals) – 372 tons.

Major solid waste generators in Sibley County include; Michaels Foods (food waste) – 293 tons, Seneca Foods (food waste) - 4200, Jerry’s Foods (food waste and paper waste) – 220 tons. All of the above companies have strong recycling programs in place and supply their recycling tonnages to the Tri-County Solid Waste Office on an annual basis. The Tri-County Solid Waste Office offers assistance to all of the above mentioned companies in the form of waste audits and reduction workshops.

### ***E. Special Waste/ Problem Materials***

A special waste or a problem material is typically a non-hazardous or industrial waste that may require special handling or consideration at the disposal area due to its characteristics. Special waste consists of major appliances, fluorescent bulbs, tires, used oil, oil filters, vehicle batteries, electronic waste and other similar items. The Tri-County has specific programs to collect and recycle these items they are included in the value reported as 'Other Recyclables'. Tables 2.24 through 2.26 provide a summary of special wastes recycled in all three Counties for 2011<sup>12</sup>.

**Table 2.24: Le Sueur County Special Waste Recycling (in tons) for 2011**

<b>Waste Item</b>	<b>Volume (Tons)</b>		
	<b>Residential</b>	<b>Commercial</b>	<b>Total</b>
Major appliances	126.0	39.86	166
Used motor oil	2.52	43.36	46
Oil filters	1.25	11.73	13
Vehicle batteries	5.0	165	170
Waste tires	137.79	71.10	209
Fluorescent bulbs	3.25	10.75	14
Pallets	0	653.77	654
HHW	1.85	-	2
Latex	6.0	7.0	13
Electronics Waste	15.50	9.48	25
Antifreeze	1.8	4.2	6
<b>Total</b>	<b>303.36</b>	<b>1,016.25</b>	<b>1318</b>

**Table 2.25: Nicollet County Special Waste Recycling (in tons) for 2011**

<b>Waste Item</b>	<b>Volume (Tons)</b>		
	<b>Residential</b>	<b>Commercial</b>	<b>Total</b>
Major appliances	132.7	85.4	218
Used motor oil	2.5	32.5	35
Oil filters	2.0	12.8	15
Vehicle batteries	172	29.9	202
Waste tires	73.1	8.8	82
Fluorescent bulbs	3.0	19.10	22
Pallets	0	1,035.19	1,035
HHW	2.3	5.69	8
Latex	6.50	1.50	8
Electronics Waste	25.0	138.75	164
Antifreeze	3.5	59.5	63
<b>Total</b>	<b>422.60</b>	<b>1428.94</b>	<b>1,852</b>

**Table 2.26: Sibley County Special Waste Recycling (in tons) for 2011**

<b>Waste Item</b>	<b>Volume (Tons)</b>		
	<b>Residential</b>	<b>Commercial</b>	<b>Total</b>
Major appliances	85.20	15.50	101
Used motor oil	4.59	7.04	12
Oil filters	0.8	6.0	7

Waste Item	Volume (Tons)		
	Residential	Commercial	Total
Vehicle batteries	5.9	87.10	93
Waste tires	113	32.0	145
Fluorescent bulbs	1.50	3.51	5
Pallets	0	13.01	13
HHW	3.85	3.0	7
Latex	5.0	0.70	6
Electronic Waste	18.52	3.32	22
Antifreeze	2.0	1.0	3
<b>Total</b>	<b>241.36</b>	<b>172.18</b>	<b>414</b>

### F. Recyclables

Currently, Tri-County on behalf of Le Sueur and Sibley Counties has a recycling contract with Waste Management. This enables other licensed haulers within both Counties to bring recyclables to the Waste Management transfer station located just south of Le Sueur County. Rural residents and business “self-haul” their recyclables to the Waste Management facility as well. All municipalities within Le Sueur and Sibley Counties have recycling services provided by a licensed hauler to their residents and a large percentage of the recyclables are brought to the Waste Management facility. All licensed haulers report the recycling tonnages to the Tri-County as required by law each year for annual reporting regardless of where they deliver recyclables.

Table 2.27: Le Sueur County General Recycling (in tons) for 2011

Recycling Material	Volume (Tons)		
	Residential	Commercial <sup>1</sup>	Total
Corrugated cardboard	6.0	1,027.58	1,034
All other paper	592.25	361.22	953
Metals	64.65	2,624.83	2,689
Glass	208.37	103.94	312
Plastics	60.37	248.19	309
<b>Total</b>	<b>931</b>	<b>4,366</b>	<b>5,297</b>

<sup>1</sup>Commercial/industrial numbers include undocumented recycling.

<sup>1</sup>All tonnages were obtained from 2011 SCORE reports for residential and commercial recycling.

Table 2.28: Sibley County General Recycling (in tons) for 2011

Recycling Material	Volume (Tons)		
	Residential	Commercial <sup>1</sup>	Total
Corrugated cardboard	18.33	266.82	285
All other paper	342.75	117.66	461
Metals	116.54	158.42	275
Glass	52.12	20.30	72
Plastics	34.02	61.84	96
<b>Total</b>	<b>564</b>	<b>625</b>	<b>1,189</b>

<sup>1</sup>Commercial/industrial numbers include undocumented recycling.

<sup>1</sup>All tonnages were obtained from 2011 SCORE reports for residential and commercial recycling.

Nicollet County has a contract with Hansen Sanitation to collect recyclables from the Nicollet County Rural Recycling drop boxes located in Lafayette, Nicollet, Norseland and St. Peter in Nicollet County. These drop boxes are available 24/7 year around and are exchanged at various times throughout the week. This material is taken to the Riverbend Recycling Center (located in North Mankato), which also provides a drop-off point for individuals. This facility contains a sort-line for recycling and allows for additional sorting after source separated recycling has occurred in order to provide the best possible product to send to the markets.

Nicollet County has a contract with the City of North Mankato which provides the processing and marketing of recyclables. Incorporated Cities in Nicollet County have organized collection with licensed haulers in Nicollet County. These haulers also report recycling tonnages annually to the Tri-County. Commercial businesses in Nicollet County usually contract for recycling services with a licensed hauler in Nicollet County. Table 2.29 provides a summary of residential and commercial recycling for Nicollet County based on 2011 SCORE reports.

**Table 2.29: Nicollet County General Recycling (in tons) for 2011**

Recycling Material	Volume (Tons)		
	Residential	Commercial <sup>1</sup>	Total
Corrugated cardboard	411.1	2,113.1	2,524
All other paper	1,054.6	8,333.8	9,389
Metals	86.08	2,137.92	2,224
Glass	311.6	29.5	341
Plastics	183.3	527.4	711
<b>Total</b>	<b>2,047</b>	<b>13,142</b>	<b>15,189</b>

<sup>1</sup>Commercial/industrial numbers include undocumented recycling.

<sup>1</sup>All tonnages were obtained from 2011 SCORE reports for residential and commercial recycling.

### G. MSW

Tables 2.30, 2.31 and 2.32 present the 2011 disposal practices recorded for residential and commercial/industrial waste generators in the Tri-County service area. This information is required by law to be reported annually by our licensed solid waste haulers. Additional information is provided by our commercial/business sector on their solid waste and recycling habits. Some businesses completely rely on licensed haulers to manage their solid waste and recycling while others can be their own hauler of recyclables and solid waste.

**Table 2.30: Disposal Practices of Residential and Commercial Generators -Le Sueur County (2011)<sup>1</sup>**

Disposal Practice	Volume (Tons)		
	Residential	Commercial	Total
Landfilled	1,256.70	5,329.30	6,586.00
Processed at Wilmarth	2,399.81	4,555.19	6,955.00
On-Site Disposal	1,039.00	(no data)	1,039.00
Problem Materials	279.50	240.5	520.00
Recycled	1,379.04	8,298.96	9,678.00

Disposal Practice	Volume (Tons)		
	Residential	Commercial	Total
Total	6,354.05	18,423.95	24,778.00
Percent of Total	26%	74%	100%

<sup>1</sup>All tonnages were obtained from 2011 SCORE reports for residential and commercial recycling.

Table 2.31: Disposal Practices of Residential and Commercial Generators -Nicollet County (2011)<sup>1</sup>

Disposal Practice	Volume (Tons)		
	Residential	Commercial	Total
Landfilled	2,115.5	5,297.50	7,413.00
Processed at Wilmarth	4,832.2	4,788.8	9,621.00
On-Site Disposal	1,102.0	(no data)	1,102.00
Problem Materials	230.80	555.20	786.00
Recycled	2,598.82	14,633.18	17,232.00
Total	10,879.32	25,274.68	36,154.00
Percent of Total	30%	70%	100%

<sup>1</sup>All tonnages were obtained from 2011 SCORE reports for residential and commercial recycling.

Table 2.32: Disposal Practices of Residential and Commercial Generators -Sibley County (2011)<sup>1</sup>

Disposal Practice	Volume (Tons)		
	Residential	Commercial	Total
Landfilled	998.24	4,573.76	5,572.00
Processed at Wilmarth	158.27	615.73	774.00
On-Site Disposal	487.00	(no data)	487.00
Problem Materials	216.72	42.28	259.00
Recycled	1,077.57	5,025.43	6,103.00
Total	2,937.80	10,257.20	13,195.00
Percent of Total	40%	60%	100%

<sup>1</sup>All tonnages were obtained from 2011 SCORE reports for residential and commercial recycling.

## 2.9 SUMMARY AND REVIEW OF SOLID WASTE MANAGEMENT EFFORTS BY THE TRI-COUNTY

### 2.9.1 Local and Regional Solid Waste Planning in the last 5 Years

The Tri-County Board has taken on a number of initiatives over the past few years. The following activities have been started in the past 5 years or so and are on-going programs in all three Counties.

- ❖ Message in the Bottle Program – Bottle shaped recycling containers have been purchased by the Tri-County through its RAM membership. The recycling containers have then been placed at local gas stations for customers to conveniently recycle their plastic and aluminum beverage containers. Message in the Bottle containers have also been purchased for the local Park Boards to place containers in local County parks. Containers have also been purchased for local 4H Groups to place at the local County Fair grounds and at fair times and other activities held at these locations throughout the year.
- ❖ Take it to the Box Program – This program is a prescription drug take back program. It includes prescription drugs for pets as well as humans. Local area residents can bring

their old or unused prescription medication to the local County Sheriff's office where a properly labeled box or bin is located for residents to conveniently dispose of their prescription medication. The medication is then securely packaged and transported to the Xcel Wilmarth waste to energy facility where the boxes of prescriptions are immediately incinerated.

- ❖ Agricultural Bag disposal - Currently Sibley County is sponsoring this program to discourage farming operations of burning or burying large thick mil. of plastic agricultural bags. These bags are typically used in large farming operations to store silage or other feed stocks for later use. The bags are then torn apart over time as the feed stock is being consumed. The remaining plastic material is usually burned or buried. Sibley County has set up a program working with the local Farmers Coops in three (3) locations across the County. The Farmers Coops have agreed to let Sibley County place roll off containers and or dumpsters at the Coops for Farmers to bring in and properly dispose of the plastic ag bags. The material is then transported to a local landfill for proper disposal. Small pilot projects have continued over the past year to test having the material recycled for the plastic markets.
- ❖ Tires, Appliances and Electronics Collections - All three Counties have annual collection events for these materials usually held in the spring of each year. The collections have become very popular among the County residents and are very successful with the amount of materials collected. Materials collected are recycled at various vendor business locations in Minnesota.
- ❖ The Tri Counties discussed, collaborated with and successfully negotiated reciprocity contracts for Le Sueur County and Scott County for residents in Le Sueur County to be able to take their household hazardous waste materials to the Scott County Facility near Jordan, MN. Tri County was also able to establish a reciprocity agreement with McLeod County on behalf of Sibley County residents that allows Sibley County residents to take their household hazardous waste materials to the McLeod County Facility in Hutchinson, MN.
- ❖ Tri County Solid Waste also added more "Recycle Lights" locations in all three Counties. This is a seasonal program for residents to dispose of their old broken Christmas lights at a local hardware store. Currently there are six (6) locations in the Tri County area that will take broken Christmas lights.

Tri County also approached Brown County in discussions to see if there was any interest by Brown County to join Tri County to achieve a greater scale of economies and cost savings for all Counties involved. Brown County did express interest but after a number of meetings it was decided to currently leave existing programs in place for all Counties but the door was left open for future discussions should a need present itself.

### **2.9.2 Past Impediments/Barriers to the Development of Projects on a Regional Basis**

Barriers to the development or expansion of projects on a regional basis in the past have included the following:

- ❖ Lack of Funding - It is expected that the reduction in state and local revenue sources will impact the expanded delivery of additional solid waste management programs. Financial capital will need to be obtained elsewhere for innovations to the Solid Waste Collection System.
- ❖ Changes in funding may provide incentive to find 'Pay for Systems' or other sources besides general tax revenue.
- ❖ Geography - Because the Tri-County location in the state, transportation costs can sometimes be prohibitive when it comes to collecting and moving recyclable materials to end markets. Even distances or locations within the County can be prohibitive. For example, rural residents in our Counties do not get to our collection sites for recycling or hazardous waste on a daily or weekly basis so they usually end up waiting to dispose of materials until a mobile collection comes to their area. This happens a lot specifically regarding hazardous waste collections.
- ❖ Capital Costs - The costs to increase recycling containers or purchase new processing equipment are often prohibitive to expanding the County's programs.
- ❖ Le Sueur and Nicollet Counties will continue to experience population, household and job growth, and will need to accommodate solid waste management services for the growing population and business community.
- ❖ Including manufacturers in the system, through disposal responsibility or incentives, may have a positive impact on waste volume reduction.
- ❖ Even though the rural population is declining in the county, backyard or on-site disposal is still a concern.
- ❖ The recent recession and nearby rates of unemployment create a mounting problem in state and local efforts to sustain existing levels of property tax revenues necessary to operate a fully integrated solid waste management program.
- ❖ Tri-County will continue to have a dispersed rural growth pattern of households, outside of the major communities. Therefore, it will be difficult to support countywide household traditional curbside collection or implement innovative recycling

programs (ex. organics) on a cost effective basis where low densities or volumes exist.

- ❖ State trends and solid waste management data collected by the MPCA may suggest the recycling rates, waste reduction efforts and reuse opportunities have reached their peak. Consumer culture tends to purchase and generate wastes and it is a challenge to identify ways to reduce recyclables in the waste stream.

### **2.9.3 Resolution Measures for Conflicting/Overlapping or Local Initiatives**

Overall, there has not been much overlap in local solid waste management efforts, so there are few conflicts or duplicative issues to report. Nicollet County along with the City of North Mankato operates the Riverbend Recycling Center in North Mankato. This facility is open to all residents of Nicollet County. This would be an overlapping recycling initiative to some of the residents of Nicollet County in the Cities of St. Peter, Nicollet, Courtland and Lafayette as they have organized collection for solid waste and recycling services but these residents along with any rural resident can use this facility.

The Riverbend Recycling Facility is supported by Nicollet County rural recycling drop boxes. These boxes are located in Nicollet, Klossner, St. Peter and Norseland. The overlap of recycling services has promoted and produced more rural recycling in Nicollet County. The Tri-County Board's solid waste special assessment fees have allowed Counties to operate their programs independently and not rely on other counties for support.

## **CHAPTER THREE – EXISTING AND PROPOSED INTEGRATED SOLID WASTE MANAGEMENT SYSTEM**

### **3.1 INTRODUCTION**

Resource recovery is the preferred waste management system for the Tri-County's integrated waste management system. This Chapter focuses on discussing the existing integrated waste management system in place as well as the existing goals for the system's improvement. Since the Tri-County's waste management system is a matured system, it will still serve as the proposed integrated waste management system for the next ten-year planning period. It is the Tri-County's intent to allow Public Entities, upon prior consent of the jurisdictional county, to contract with other firms who offer an integrated solid waste management system with waste processing consistent with the implementation of this plan. Other disposal options may, however, be utilized consistent with the State of Minnesota's waste management hierarchy. Goals and strategies for improvement are also outlined in this Chapter. Alternatives to the proposed system are also offered to respond to any operational challenges that may arise. Reasons for the continued use of land disposal facilities by the Tri-County are discussed at the conclusion section of this Chapter.

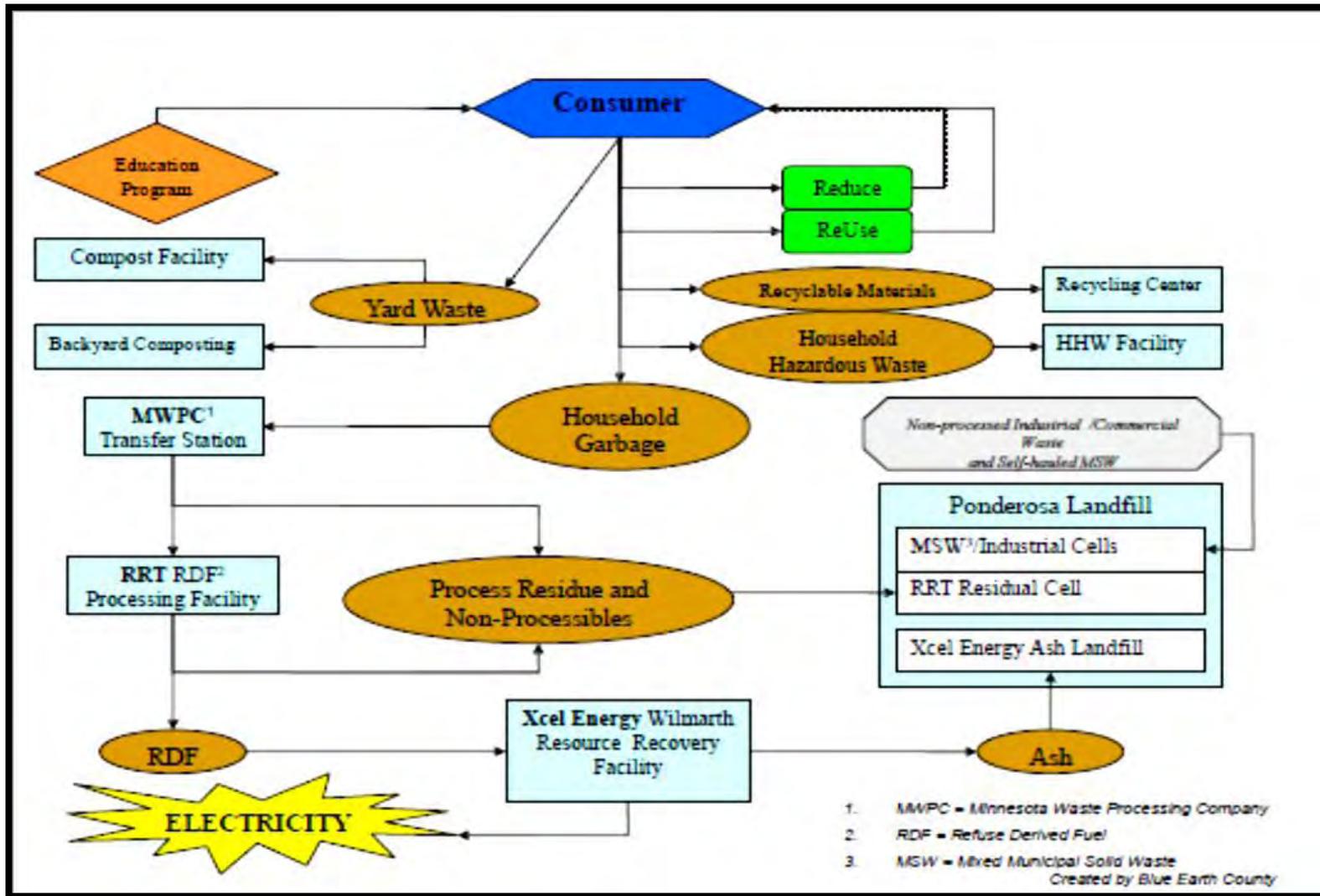
### **3.2 BACKGROUND/HISTORY OF EXISTING WASTE MANAGEMENT SYSTEM**

Minnesota state law (chapter 115A) directs counties to implement solid waste management systems that reduce land disposal, to the extent feasible and prudent, and expresses a clear preference for resource recovery over landfills. This direction, provided in the Waste Management Act, provides specific direction to the authority given to counties for solid waste management under chapter 400:

*In order to protect the state's water, air and land resources so as to promote the public safety, health, welfare and productive capacity of its population, it is in the public interest that counties conduct solid waste management programs.*

To meet this requirement, the 1994 Tri-County Solid Waste Management Plan provided an in-depth review of the existing solid waste management system and the recommendation to implement an integrated solid waste management program for the Tri-County using existing solid waste facilities in the area. The 2001 Solid Waste Plan reaffirms the recommendations from the 1994 Plan. The integrated solid waste management system implemented by the Tri-County is mature and successfully operational. This history is summarized in this section. Figure 3.1 illustrates the existing integrated solid waste management system that is working today for the Tri-County.

Figure 3.1: Regional Integrated Waste Management System



### **3.2.1 Summary of System Development History**

In 1993, the professional engineering and planning consulting firm Rieke, Carrol, and Mueller (RCM) was retained to investigate the various solid waste alternatives potentially affecting the Tri-County and to prepare a five year plan pursuant to Chapter 115A of the State's Solid Waste Management Act. The alternatives studied included resource recovery options, along with the future need for sanitary landfills and waste abatement options.

Based on preliminary review of potential alternatives, private enterprise proposals, and existing markets, these alternatives were developed:

1. Integrated waste management with refuse derived fuel production, municipal solid waste composting, and landfilling of ash and residuals;
2. Construction of a resource recovery facility with landfilling of materials not suitable for resource recovery; and
3. Sanitary landfilling all of the solid waste which must be disposed of after recycling and waste reduction.

Recycling, yard waste composting, waste reduction, and household hazardous waste management are integral components common to each of the alternatives for a solid waste management program. Energy recovery alternatives were considered for two different incineration options:

1. Refuse derived fuel production with a local established market and
2. Construction of a mass-burn incineration system for energy recovery for which a local market could be developed.

MSW composting alternatives were considered in two different size ranges reflecting different combinations of counties in the area and composting technology available. Even though no established market was located in the area, this analysis assumed revenue from the sale of compost from developing markets.

The landfill alternative considered:

1. Development, expansion, and upgrading of existing area landfills and
2. Siting and developing a new regional landfill.

The reviews of alternatives and subsequent analysis led to a recommendation that the Tri-County pursue the State solid waste management hierarchy to the extent possible emphasizing utilization of existing and future local options. It further led the Tri-County to generally endorse a public/private enterprise proposal to develop and implement a regional solid waste management system that utilizes and maximizes existing resource recovery facilities.

**A. Tri-County SW Board, Executive Sub Committee & Solid Waste Advisory Committee (SWAC)**

The Tri-County Solid Waste Board, its Executive Sub Committee and SWAC conducted a review of solid waste alternatives over the next several years, starting in the spring of 1992 along with Blue Earth County. The process included facility tours, as well as proposals and presentations by affected or interested parties. The facilities involved included the Wilmarth waste-to-energy facility (in Mankato), the Prairieland MSW Composting facility (in Truman) and the Ponderosa Landfill (Blue Earth County near Mankato).

After touring the facilities, hearing presentations and proposals, the Tri-County developed an evaluation process for looking at the alternative waste management options. Each alternative was evaluated based on the solid waste hierarchy and also evaluated for the following criteria:

1. Environmental Effects
2. Costs/Marketability
3. Liability to County and to Public
4. Changing Technology
5. Changing Federal and State Regulations
6. Facilities - Requirements - Capacity
7. Transportation/Designation
8. Regionalization

After the evaluation process, a recommendation for integrated waste management in the Tri-County service area and Blue Earth County was accepted and recommended to the Sibley, Le Sueur & Nicollet County Boards. It was approved by them in 1993 with the following resolution:

*Pursuant to the Statutes of the State on Minnesota, Chapter 115A.02, section (b), The waste management goal of the state is to foster an integrated waste management system in a manner appropriate to the characteristics of the waste stream. The Following waste management practices are in order of preference:*

1. *Waste Reduction and Reuse;*
2. *Waste Recycling;*
3. *Composting of Yard Waste and Food Waste;*
4. *Resource Recovery through Mixed Municipal Solid Waste Composting or Incineration;*
- and*
5. *Land Disposal*

### 3.3 POLICY/GOALS FOR IMPROVEMENT UNDER THE EXISTING INTEGRATED SYSTEM

Through the use of the existing integrated waste management system, the Tri-County Solid Waste Board is committed to achieve at least 85% landfill abatement of Public Entity waste. The Board has a strong commitment to operate the existing integrate system in the most environmentally sound and efficient manner possible. Table 3.1 summarizes the goals that would improve waste abatement programs, such as reduction and recycling, and resource recovery efforts in the Tri-County service area.

Table 3.1: Goals for Solid Waste Improvement under the Existing Integrated System

Management Area	Goals
<b>Source Reduction</b>	Explore avenues to encourage residents and businesses to reduce their solid waste.
<b>Waste Education</b>	Develop and implement a comprehensive waste management education strategy.
	Educate students of all ages, residents and businesses on how, when, and where solid waste can be recycled.
	Educate residents and businesses on how, when, and where to properly dispose of hazardous waste.
<b>Recycling</b>	Significantly increase the recycling rate for all three counties within the next ten years. Conduct more recycling programs/ events with & for our schools, 4H Groups, Boy Scouts, Girl Scouts and Church Groups.
<b>Yard Solid Waste Management</b>	Comply with state restrictions on the landfill of yard waste.
	Educate the public on options for managing yard waste.
<b>Source Separated Organic Materials</b>	Provide improved options for the collection and disposal of source separated organic materials.
<b>Solid Waste Incineration and Energy Recovery</b>	Recover/discover more resources from the solid waste stream in all three counties.
	Meet current capacity needs at the Resource Recovery & Waste to Energy Facilities.
<b>MSW Land Disposal Facilities</b>	Support MPCA initiatives to document landfill air emissions and the long-term impacts and costs of landfilling to support future policy decisions.
	Explore alternative means of reducing and disposing of waste not suited for RDF in order to discourage land disposal.
<b>Solid Waste Tire Management Programs</b>	Reuse or recycle waste tire material into other useful products.
	Enhance tire disposal education efforts.
<b>Electronic Products</b>	Assure a clean and healthy environment by preventing the illegal disposal of electronics in lakes, woods, ditches, and other rural areas.
	Comply with state laws on electronic products recycling and disposal.
<b>Major Appliance Management</b>	Assure a clean and healthy environment by preventing the illegal disposal of appliances in lakes, woods, ditches, and other rural areas.
	Comply with state laws on appliance recycling and disposal.
<b>Automotive Mercury Switches, Motor Vehicle Fluids And Filters, And Lead-Acid And Dry Cell Batteries</b>	Promote environmentally friendly and health-hazard free options for disposing automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries.
	Comply with state laws regarding the disposal of automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries
<b>Household Hazardous Waste Management</b>	Educate residents and businesses on the benefits of the proper disposal of household and business hazardous waste products.
	Increase separation and management of materials containing lead, mercury, and PCBs from the waste stream.
<b>Demolition Debris</b>	Provide residents and businesses with opportunities for the disposal of demolition debris.

Management Area	Goals
	Ensure that contractors abide by state and federal regulations regarding the disposal of demolition debris. Also educate contractors on the practice of recycling asphalt shingles
<b>On-site and Illegal Disposal</b>	Increase participation of rural residents in the waste management system.
	Use enforcement to discourage illegal dumping practices, especially in lakes, woods, ditches, and other rural areas.

### 3.4 DESCRIPTION OF EXISTING WASTE FACILITIES IN USE

The integrated solid waste management system described in the 1994 Tri-County Solid Waste Plan has evolved into a mature program involving a number of facilities. The major change in the original integrated system was that the Prairieland Solid Waste Compost Facility (now an RDF Facility) did not have capacity for waste from outside Martin and Faribault Counties. This shifted the emphasis from composting to resource recovery through waste-to-energy at the Wilmarth Power Plant.

#### 3.4.1 Municipal Solid Waste Processing (RDF Production, MWPC and RRT RDF)

##### *A. Minnesota Waste Processing Company (MWPC)*

Tri-County Solid Waste MSW is currently handled at two facilities for processing. Licensed Tri-County Solid Waste haulers are allowed to tip their loads at the Minnesota Waste Processing Company (MWPC) Transfer Station in Mankato. MSW is also brought directly to the RRT RDF Facility in Newport, MN. The solid waste is transported to the Resource Recovery Technologies, LLC (RRT) recovery facility in Newport Minnesota for processing into refuse derived fuel (RDF). The RDF is then returned to the Wilmarth Waste-To-Energy Power Plant owned by Xcel Energy in Mankato as fuel.

##### Location

The MWPC Transfer Station is located in Blue Earth County on Summit Avenue in a heavy industrial park on the north end of the City of Mankato. Waste from MWPC is transported for processing to the RDF Waste Processing Facility owned and operated by RRT in Newport, Minnesota. Newport is located southeast of St. Paul, Minnesota in Washington County.

##### Operational History

MWPC constructed and operates a transfer station in Blue Earth County. The MWPC transfer station is jointly owned by RRT and LJP Enterprises. The facility was constructed in 1994 on NSP property next to the Wilmarth Power Plant. RRT has long term commitments as the fuel producer for Xcel Energy. RRT's role is to process the mixed municipal solid waste (MSW) to recover marketable ferrous and non-ferrous metal, glass, grit and RDF fuel, with minimal reliance placed on landfilling. The RDF fuel is used in the Xcel Wilmarth Waste-to-Energy Power Plant.

The MWPC Transfer Facility is comprised of several components: the scale, tip floor, loadout area, recyclable collection area and office area. The facility also has a separate area for the storage of RDF. MWPC accepts cardboard, appliances, tires, waste electronics and lead acid batteries for recycling. Employees use front-end loaders to load waste collected at the transfer station into a compactor unit for compaction into semi-trailers. The semi-trailers use walking floors for easy unloading. The waste is then transferred to the RDF Processing Facility in Newport.

MWPC also has two shear shredders located on-site, to size source-separated industrial waste to meet fuel specifications for Wilmarth's use. This source separated material must be separated at the generation site, assuring that it contains no glass, metal, or any other unacceptable items. These shredders have a capacity to size 5 tons of this type of waste per hour.

#### Permitted Capacity

The MWPC Transfer station has a permitted capacity of 250 tons per day for incoming solid waste, with a four day (800 ton) storage limit. MWPC also collects tires, appliances and electronics. The facility has a permitted storage capacity of 1200 tons for RDF storage prior to use in the Wilmarth Power Plant. In the 2011 MWPC annual report 41,521 tons of materials were received with 22,857 tons sent to Newport for processing, 428 tons of bulky materials sent to the Ponderosa Landfill segregated cell, 60 tons of recyclables, and 18,176 tons of RDF sent to Wilmarth from the source-separated industrial shredder. The Newport RDF Processing Facility is permitted to receive 500,000 tons of waste per year with a tipping floor capacity of 3,000 tons of MSW.

#### Available Capacity/Life Expectancy

MWPC transfer station was constructed in 1994 on NSP Property. The facility is in excellent shape and is expected to be useable until at least 2030. In a lease agreement between MWPC and RRT, the building will revert to Xcel Energy if it is no longer used as a transfer station. The Newport RDF Processing facility began accepting waste for processing in 1987. There is a continuing maintenance plan in place. MWPC will need to renew its permit prior to December 6, 2015 to continue operating. Currently, RRT and Xcel have a contract in place through 2017 which indicates that MWPC will be operational through 2017 at a minimum. Given the now expanded capacity of the Prairieland RDF facility, it will serve as a contingent facility if this Newport RDF facility is no longer usable. The Tri Counties will address these contingencies on an as needed basis throughout this planning period.

#### **B. RRT Facility in Newport**

The RDF Processing Facility in Newport is owned and operated by Resource Recovery Technologies, LLC (RRT) and serves primarily Washington and Ramsey Counties. The

facility converts the municipal solid waste (MSW) to refuse derived fuel (RDF). The average heating value of the RDF produced at this facility is approximately 5600 btu/lb. The RDF product contains a relatively high percentage of plastics including banding, plastic rolls and magnetic tape. The Newport facility consists of two processing lines designed to process approximately 50 tons per hour. The plant layout can accommodate an additional processing line, but the operating permit would have to be modified to increase the permitted capacity for the facility.

The RDF Processing at Newport consists primarily of the following equipment:

- ❖ Tipping floor;
- ❖ Grapple cranes;
- ❖ Conveyors;
- ❖ Flail mills;
- ❖ Magnetic separator;
- ❖ Eddy current separator;
- ❖ Primary disc screens;
- ❖ Secondary disc screens;
- ❖ Air knife classifiers;
- ❖ Clean-up air knife classifiers;
- ❖ Secondary shredders;
- ❖ Oversize bulky waste shredder; and
- ❖ RDF and residue compactors.

The secondary shredders are 800 horsepower. Screens have been added to the shredders that transfer oversized materials back through the shredder to produce a more uniform product. An eddy current separator is used to separate the aluminum from the waste stream. Plant operations consist of one 10-hour processing shift Monday through Saturday and one eight (8) hour processing shift Sunday through Thursday. Additionally, there is one 8-hour maintenance shift Sunday through Thursday. A second 10-hour shift is added on Sunday if needed. After processing the refuse into RDF, the percentage of processing rejects from southern Minnesota Counties is shipped to the Ponderosa Landfill for final disposal in a cell dedicated to bypass and residuals from the integrated system. Figure 3.2 shows the RRT RDF facility processing schematic.

#### Permit Status

The MWPC operates under an active MPCA Solid Waste Permit (SW-452). It was first permitted in 1994, and has gone through re-permitting numerous times since then. The Newport RDF Processing Facility Solid Waste Permit (SW-286) was first issued in 1987 and the facility is currently permitted through September 2016. Application to renew this facility's permit will be made before 2016. If MPCA does not renew the permit, Tri-County

will again consider all its options including the opportunity to divert its solid waste to Prarieland RDF facility or another (MPCA approved) facility for processing.

#### Degree of Development of Technology

Both the Transfer Station and Processing Facility have been operational for a number of years and use established operational techniques.

#### Dependency on Volume

MWPC has waste delivery agreements with a most area cities. Many of these agreements were initially developed in 1994 and 1995. RRT has a service agreement with Washington and Ramsey Counties to provide waste processing through December 2015. It is the belief that these agreements will be renewed and will also be in place throughout this 10-year plan period. The process for renewing these agreements will start earlier-at least 6 months to the end of current agreements. This will give enough time for alternative arrangements to be put in place should there be any unforeseen reason(s) for the discontinuation of current agreements with MWPC.

#### Financial Considerations

An Agreement for Services may be written for an initial term of 15 years renewable with a mutual agreement for additional terms by Sibley, Le Sueur & Nicollet Counties and Resource Recovery Technologies, LLC (RRT). The tipping fee includes RRT's processing fee, a drop fee for operational costs of the transfer facility. The current tip fee is \$91.00 per ton. Tri-County Solid Waste does not subsidize the tip fee and there are no additional fees established by Tri-County Solid Waste.

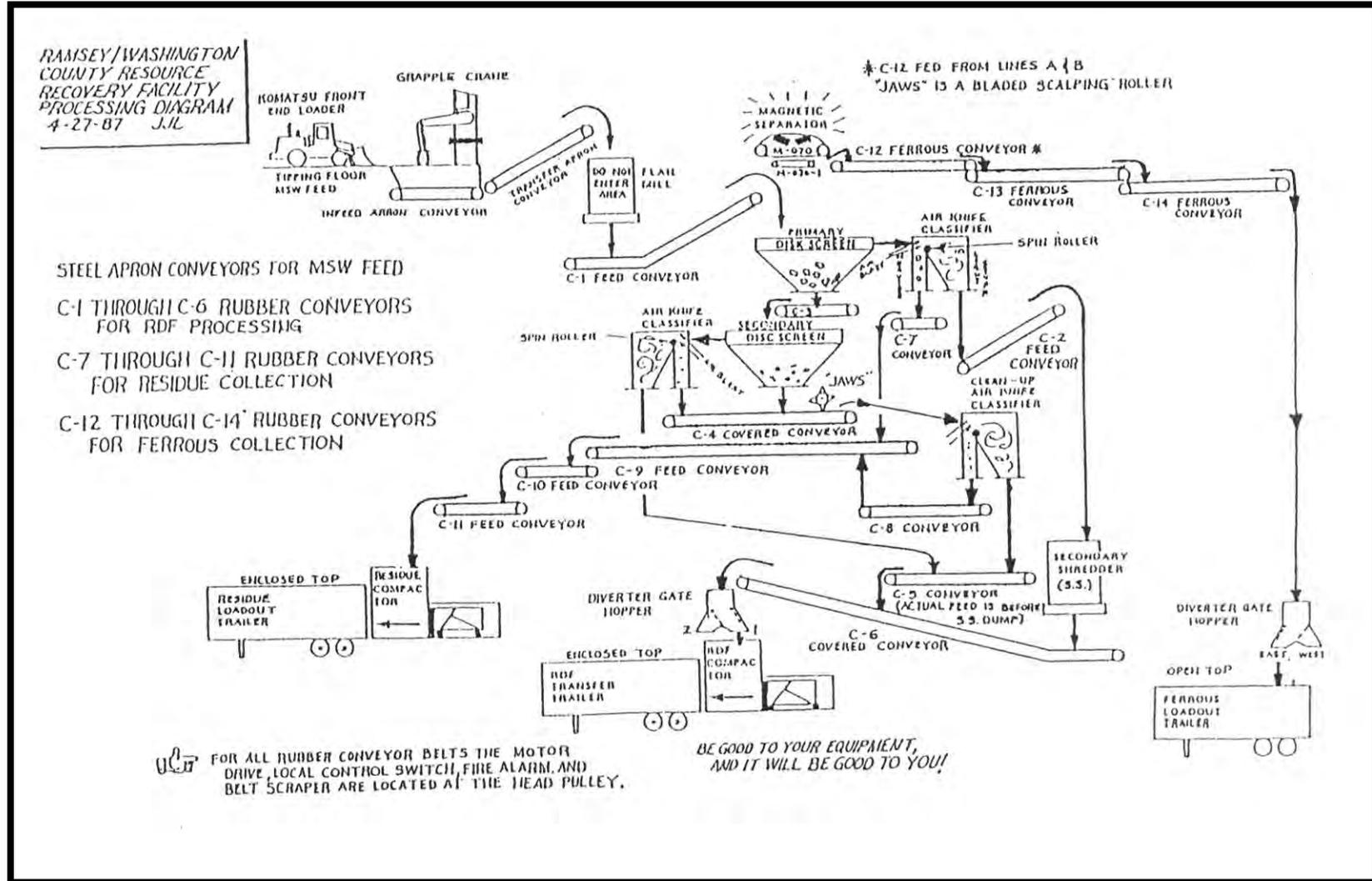
MWPC is responsible for all costs associated with the operation of the transfer station. Tri-County Solid Waste (Nicollet, Sibley and LeSueur Counties) and Blue Earth County are responsible for costs that can be verified by RRT to separate, manage, store, transport and properly dispose of hazardous, infectious and other unacceptable wastes found in MSW delivered to the processing facility. RRT must first attempt to trace these wastes back to the generator for payment and proper disposal.

#### Environmental Considerations

The MWPC Transfer Station and RRT have approved closure/post closure plans that state that once waste is no longer received the facility will be cleaned and secured in a manner that eliminates, minimizes or controls the escape of pollutants. These facilities are for transfer and processing of waste. There is short term storage, but there is no long term disposal storage of solid waste, so once waste is no longer received at the facility, the potential for environmental degradation to occur from the closed facility will be eliminated. Any appliances, tires or batteries collected at either of the facilities are handled and stored according to MPCA requirements as outlined in their facility plans. Any hazardous materials found in the waste are stored in secondary containment and Tri-County Solid

Waste and or Blue Earth County is contacted. Both the MWPC Transfer Station and the Newport RRT RDF Processing Facility are currently in compliance with federal, state and local regulations.

Figure 3.2: RRT RDF facility waste processing schematic



### ***C. Xcel Wilmarth Waste-to-Energy Facility, Resource Recovery Facility***

Waste processing and incineration can recover energy from solid wastes and reduce reliance on other traditional fuels. Solid waste, when incinerated, is a low-sulfur fuel compared to many fossil fuels.

Incinerating solid waste as a fuel generates steam which is used for electricity, industrial processes or space heating. Waste processing and incineration facilities can be generally divided into two categories - mass burn incinerators and facilities that produce and burn refuse derived fuel (RDF). Mass burn facilities are designed to accept and burn solid waste directly as received from residential and commercial refuse collection vehicles. At RDF facilities, waste is processed to convert solid waste into a dried material (RDF) or into pellets - densified refuse derived fuel (dRDF) for use as a primary fuel or supplemental fuel to coal or wood.

RDF facilities rely on mechanical separation systems to remove the noncombustible fraction of solid waste prior to processing. RDF is normally burned in slightly modified existing coal-fired furnace or boiler plants. RDF may be burned as the sole fuel in a furnace/boiler or as a supplemental fuel to coal or wood chips. The RDF may be burned in a loose form ranging up to four inches in size or in pelletized form (dRDF) depending on the system. Densified RDF has the advantage over RDF of being storable and more compatible with existing coal boiler-fuel feed systems. The non-combustible fraction of the solid waste stream is rejected for disposal along with waste ash generated at mass burn facilities. Some facilities have a source separation system which pulls recyclable materials from the waste stream before incineration. Pulling materials such as glass, metal and organics from the waste stream helps make the incinerator function more efficiently and assists recycling efforts.

Waste processing and incineration reduce the volume of solid waste that might otherwise be landfilled. In a waste incineration system, the volume of waste entering a facility can be reduced by 85-90 percent under optimal conditions. However, this technology is vulnerable to many factors that can reduce its volume reduction efficiency. Actual reduction in the total volume of solid waste is approximately 65-70 percent because of the production of ash that usually requires land disposal, materials in the waste stream that are not combustible and solid wastes that cannot be incinerated when a power plant is shut down for routine or emergency maintenance. The ash rejects and bypass waste must still be disposed of after the incineration process. RDF and dRDF can recover up to 70 percent of the solid waste load. Reject residue from RDF production is normally buried in landfills although some additional recovery can be accomplished through composting.

There is currently one waste-to-energy facility located in Blue Earth County and none in the surrounding counties. Xcel Energy, a Minnesota corporation, owns and operates the Wilmarth refuse derived fuel (RDF) incineration facility that burns processed solid waste to produce energy. The ash generated from the Wilmarth facility is disposed in a lined mono-

fill landfill in Blue Earth County, adjacent to the Ponderosa Landfill. This retrofitted facility has been in operation for 25 years and through life cycle extension capital projects should be operational for another 15 years.

Tri-County Solid Waste currently does not own or operate and does not have plans to own or establish additional waste-to-energy facilities because there is sufficient capacity in the immediate area for the foreseeable future. With the adoption of the solid waste hierarchy, the State has placed a priority on processing the raw waste stream to recover the resources available and to reduce the volume of waste that must be landfilled. To this end, Tri-County Solid Waste will continue to strive to optimize the use of existing facilities to reduce land disposal of waste.

#### Location

The Wilmarth RDF Power Plant is located in Blue Earth County on Summit Avenue in a heavy industrial park on the north end of the City of Mankato. The ash landfill is located adjacent to the Ponderosa Sanitary Landfill, in South Bend Township, just southwest of Mankato.

#### Operational History

Xcel modified its Wilmarth Power Plant in Mankato to burn RDF. The Wilmarth Power Plant was constructed in 1947 and burned coal to generate electricity for forty years. In 1985 Xcel received a permit from the MPCA to operate an RDF incineration power plant. The permitted capacity at the Wilmarth waste-to-energy Power Plant is 600 tons RDF per day. The Wilmarth Power Plant was retrofitted by 1987 and became fully operational by 1988. The cost of retrofitting the plant was \$23 million.

On November 14, 1988, Xcel announced to the MPCA their plans to install a new baghouse filter system. On November 22, 1988, the MPCA issued a Notice of Violation (NOV) to Xcel for violation of opacity standards specified in Minnesota rules and MPCA permit conditions at the Wilmarth Power Plant. At that time the MPCA urged Xcel to replace the existing electrostatic precipitator air quality control system with a dry scrubber and fabric filter control system. In response to the NOV, Xcel reduced electrical generation from twelve megawatts to six megawatts until improvements and additional pollution control equipment could be installed. The cost of the scrubber/baghouse system was \$7 million.

Ash from the Wilmarth Power Plant is sent to the Wilmarth Ash Landfill located on a 42 acre section of land owned by Xcel within the property of the Ponderosa Landfill. On June 27, 1989, the MPCA Board voted to approve the Findings of Fact for the Environmental Assessment Worksheet (EAW) for the Wilmarth ash storage facility which concluded that the project does not have the potential for significant environmental effects. The Findings of Fact documents states that:

"The MPCA has adequate authority and sufficient staff to assure that the permit conditions and the solid waste rules are enforced. MPCA enforcement staff will provide sufficient oversight and will assure that necessary corrective actions are taken by the permittee and operator in a timely manner to maintain compliance with the permit and the applicable rules."

Blue Earth County did not feel that adequate environmental protection was provided in the MPCA permit and did not issue a County Solid Waste License at that time. A County Solid Waste Facility License was issued in September, 1991 after Xcel agreed to construct a full cell lysimeter for the landfill, upgrade leachate collection storage from 6,000 gallons to 20,000 gallons, move the facility back from the conservancy zone and for Xcel to fund an oversight engineer during liner construction that would work under the direction of the County.

The 1991 design of the Wilmarth Ash Landfill called for four cells with a total capacity of 767,000 cubic yards of ash and cover material. The expected life of the facility was to the year 2010. After Xcel converted to burning refuse derived fuel in 1987, ash from the process was placed in two temporary cells on the same property. In 1992 Cells 1 and 2A of the permanent ash disposal facility were constructed. All ash, cover material, sedimentation basin material and soils beneath the temporary ash disposal cells were transferred to the newly constructed cells in the permanent facility. The soils remaining in the area of the temporary cells were tested and the MPCA determined that the area had been properly cleaned of ash.

Between the beginning of operations in August 1987 and October 1992, Xcel temporarily stored ash in two clay-lined Type I temporary storage facilities authorized and regulated as temporary ash monofills within the permitted capacity of the Ponderosa MSW Landfill. Cells 1 and 2A of the permanent ash landfill were constructed in 1992 and all ash was moved from the temporary storage cells to the permanent landfill.

More ash was produced than initially planned, so in November, 1998 Xcel submitted a permit re-application to the MPCA proposing to expand the Wilmarth ash disposal facility and increase the capacity at the site by 989,550 cubic yards. This would bring the permitted disposal capacity at the site to 1,646,400 cubic yards. Based upon the 2011 survey, Xcel estimates that this will provide capacity thru the year 2025. The additional capacity is to be accomplished by building cells 5 through 10 as horizontal expansion to the east and south of the existing facility.

Refuse Derived Fuel used, and the resulting ash disposed have increased since 1987 when the Wilmarth Power Plant began using RDF. During 1996, the Power Plant underwent several major construction and maintenance projects resulting in a decrease in fuel used. The Plant just recently performed a life cycle extension study and has since received

approval for several additional capital improvement projects that should extend its life for another 15 years.

Table 3.2: Wilmarth Fuel Usage/Ash Disposal

Year	Volume (Tons)	
	<i>RDF Processed</i>	<i>Ash Disposed</i>
1987	8,000	1,700
1997	207,000	59,900
2007	196,622	57,796
2011	176,361	50,868

Resource Recovery Technologies, LLC (RRT) is the primary source contract for the supply of RDF fuel to Xcel Energy. Also beginning in 2012, Prairieland also started providing approximately 13,000 tons of RDF fuel to the Plant. RRT is also a 50% owner of Minnesota Waste Processing Center (MWPC) which through the RRT contract provides approximately 21,000 tons of local county waste to the Plant. RRT currently has contracts in place with various counties through the year 2015 to convert waste generated by households, commercial establishments, institutions and businesses “municipal solid waste” into refuse-derived fuel (RDF). The energy resulting from the burning of the RDF is owned and used by Xcel in its system.

Permitted Capacity

The permitted capacity at the Wilmarth Waste-To-Energy Power Plant is 600 tons refuse derived fuel per day. The permitted capacity of cells 1 through 4 of the Wilmarth Ash Landfill is 766,730 cubic yards. This includes ash and cover. With the addition of Cells 5-10, an additional 989,550 cy was approved, bringing the current permitted capacity is 1,646,000 cy. In the Facility’s 2011 Annual Report, Xcel stated that the remaining permitted capacity (airspace including final cover was 524,775 cubic yards and the remaining life was at 14.5 years .

Available Capacity/Life Expectancy

The original design of the Wilmarth Ash Landfill called for four cells to be built during the facility lifetime. The design capacity of the four cells is 767,000 cubic yards of ash and cover material. This capacity was anticipated to last until the year 2010, 22 years from the first placement of ash in the temporary cells in 1988. Xcel discovered that the original calculations for capacity use were low and the permitted capacity would be filled well before 2010. In 1998 Xcel prepared re-permitting documents requesting an expansion to the ash landfill by six additional cells increasing the total permitted capacity of the Wilmarth Ash Landfill to 1,646,400 cubic yards. As of 2011, this capacity was estimated to provide disposal capacity until 2025. Xcel will work with the MPCA to continue the permitting process as needed space for resource recovery ash continues into the future.

### Permit Status

The Wilmarth Power Plant is currently operating under their 1985 air quality permit. Since that time there have been a number of permit modifications including the addition of pollution control equipment. Initial documentation for re-permitting the Wilmarth Plant was submitted to the MPCA in September 1995. The MPCA and Xcel have been working on the permit requirements since that time. Xcel has submitted a completed draft permit to the MPCA for review. Required permits for the ash landfill include: MPCA Solid Waste Disposal Facility Permit (SW-298), MPCA Pollution Discharge Elimination System (NPDES) Permit, MDNR Protected Waters Construction Permit, and the Blue Earth County Solid Waste Facility License. Ash testing is on a quarterly basis and is conducted by Xcel. Xcel has a certified lab, an MPCA approved sampling plan and QA/QC (Quality Assurance/Quality Control) procedures in place. The ash testing results are submitted to the MPCA and meet MLCL (Maximum Leachable Control Limits).

Xcel has worked with Blue Earth County and the MPCA on a re-permitting of the ash landfill and submitted the required information to the MPCA for review in March 2011. The renewed permit is pending MPCA processing as of writing this plan.

### Degree of Development of Technology

The Wilmarth Power Plant, built in 1947, was retrofit to burn refuse derived fuel by Xcel in 1988 and the permanent RDF ash storage facility was constructed in 1992. Both facilities have been operating continuously since that time. Every January the Wilmarth facility goes through a complete maintenance inspection for safety and efficiency / operational checks. The facility was upgraded in 1997, and has received approval to continue with upgrade modifications as need be. In 2014 a new membrane wall will be replaced in one of the two boilers.

### Dependency on Volume

RRT contracts for waste from the Twin Cities metropolitan area counties and various municipalities in the Tri-County /Blue Earth County region.

### Financial Consideration

Xcel Energy is responsible for the capital and operating budgets for the Wilmarth Power Plant and ash landfill. Blue Earth County and the MPCA are responsible for the site inspections. The source of funding for participating in the integrated system, including the utilization of the Wilmarth Power Plant, is through tipping fees as discussed earlier.

### Environmental Considerations

The Wilmarth Power Plant reports its operating results to MPCA annually. The 1988 retrofit included installation of a state-of-the-art scrubber/baghouse air pollution control system. Since the primary environmental and health impacts are related to air contaminants and air quality, the air pollution control system approved by the MPCA

operates at all times the facility is in operation to minimize any health risks from air contamination.

To provide an environmentally safe storage area for the ash, Xcel constructed a Type II, permanent RDF ash storage facility consistent with MPCA rules. A lined leachate collection system was installed beneath the ash storage area. The liner system for Cells 1-2 consists of 60mil HDPE overlain by a Geonet and two and one half feet of compacted, low permeability clay soils which was then overlain by a high-density polyethylene (HDPE) synthetic lining and a sand drainage layer.

The liner system for cells 2B – 10 consist of three feet of compacted clay overlain by a Geonet sandwiched between two layers of 60 mil HDPE, and overlain by a sand drainage layer. A perforated piping network within the drainage layers direct leachate into a steel tank which has secondary containment and a leak detection system. The collected leachate is pumped and transported by tanker truck to the City of Mankato Municipal Wastewater Treatment Plant.

Blue Earth County required additional safeguards for the liner system prior to issuance of a County Solid Waste License. Under the leachate collection/liner system, Xcel placed a full cell lysimeter and a leak detection system between the lysimeter and clay layer above. The cover over the closed portions of the facility as currently designed will consist of a synthetic HDPE liner and two feet of topsoil capable of supporting good vegetative growth.

Xcel currently maintains a monitoring system around the site to detect any ground water contamination. The system consists of 17 monitoring wells that are monitored three times per year excluding the winter quarter. All testing results are maintained by the solid waste section of the MPCA, at Xcel Energy headquarters and with Blue Earth County Environmental Services. The monitoring wells will be in use for the life of the site and at least 20 years after the site is closed.

Disposal facilities must have a financial assurance mechanism that dedicates funding for long-term care of the facility. The Xcel Financial Assurance Plan has been approved by the MPCA. Updates to the information in the Financial Assurance Plan are submitted as part of the Xcel annual report. According the 2011 annual report, Xcel provides financial assurance in the amount of \$1,962,139 for the long term care of the Wilmarth RDF Ash Landfill.

The Environmental Risk Discussion of Solid Waste Management Systems found in Appendix I was used to determine the potential environmental impacts of solid waste incineration and landfilling of ash during the original review of solid waste management alternatives. These impacts were also discussed by the Environmental Services Advisory Committee as they prepared recommendations for resource recovery options. The Blue Earth County Environmental Services Department and the MPCA make routine inspections

of the ash landfill. The MPCA also inspects the Wilmarth Power Plant under the air quality permit. The Wilmarth Power Plant and the Ash Landfill comply with federal, state and Blue Earth County regulations.

#### ***D. Prairieland MSW Composting (now RDF) Facility***

The Prairieland Composting Facility is located in Truman,, Minnesota, approximately 40 miles south and west of the City of Mankato. Truman is in the northwest corner of Martin County. With the exception of Prairieland Compost Facility, no major changes have occurred in any of the facilities included in the Integrated System. Older versions of the Tri-County's Solid Waste Management Plans have a section on MSW Composting, because Prairieland MSW Compost Facility in Truman, MN was originally part of the Integrated System. At that time, waste from MWPC went to Prairieland Compost for composting, and residuals from that facility came back to Wilmarth for resource recovery.

In the late 1990's, however, Prairieland no longer had capacity for waste from the Tri-County and MWPC began shipping waste directly to Newport, MN for RDF production. At that point, Prairieland was no longer part of the Tri-County Solid Waste Integrated Waste Management System, although Prairieland continued to compost MSW and occasionally sent residual material to the Ponderosa Landfill or to the Wilmarth Power plant for resource recovery. As of 2011, however, Prairieland Solid Waste is no longer composting MSW at all. The facility has dismantled composting equipment and has purchased a larger shredder for processing MSW into RDF. Prairieland waste, therefore, is currently processed into RDF and goes to the Wilmarth Power plant for resource recovery.

The Prairieland facility is currently permitted by the MPCA to accept up to 192 tons per day (50,000 tons per year) of MSW for processing, but currently receives less than half that amount. There are no existing plans to send Tri-County waste to Prairieland for RDF processing, because numerous contracts with Xcel and RRT require that the system remain stable as it is. It is possible, however, that if problems arise with the existing system in the future, the Prairieland RDF facility could become an alternative location for processing MSW.

#### ***E. Waste Management Transfer Station***

##### Operational History and Current Status

The Waste Management Transfer Station is located in Le Sueur County in the southwest quarter of the southwest quarter of Section 23, Township 111 North, Range 26 West. The facility is currently operating under MPCA Permit SW-470. The facility accepts MSW, demolition waste and industrial waste that does not include special wastes or wastes that require special handling (an example of this is a department store with a 40 cubic yard roll-off box of light packaging materials).

All MSW received at this facility is tipped at a completely enclosed building. There is a concrete floor and an eight foot high concrete wall that separates the two receiving doors.

A front end loader pushes material up against one wall to fill the bucket and then the MSW is dropped into either a roll-off box or open transfer trailer. Any salvageable materials, such as cardboard, pallets and metals are removed and recycled from the MSW stream. All MSW tipped each day is loaded and containerized for transport. No MSW is left on the tip floor overnight. MSW is containerized in either 30 or 54 yard roll-off boxes or a transfer trailer. No waste is stored longer than one week. When boxes are full they are tarped and transported to disposal sites.

All completely loaded boxes or trailers are tarped with rodent proof covers. Partial containers are also tarped at the end of each day. MSW that is collected is taken mostly to Spruce Ridge Landfill near Glencoe, MN or the Burnsville, MN landfill. This is a change from the past destinations of, up until the last four or five years solid waste was delivered to landfills in Iowa or Wisconsin. Demolition material that is received is taken to demolition landfill near Glencoe, MN.

The Tri-County had concerns that the additional truck traffic from the increased MSW volume would have a detrimental effect on the operation of the recycling center, especially to the public drop-off recycling site. Ultimately, Le Sueur County and Waste Management came to terms and agreed upon 200 tons of MSW per day that could be received at the transfer station. A new Fairbanks Scale was purchased seven (7) years ago and put in place at the scale house. This scale has a maintenance / service agreement with its manufacturer and goes through annual inspections and calibrations.

#### Dependency on Volume

The Waste Management Transfer Facility is privately owned and operated and receives most of its waste from private businesses throughout the area. Waste Management has the responsibility to assure that sufficient quantities of waste are received to justify the expense and maintenance of this facility.

#### Financial Considerations

The facility is privately owned and operated and receives no subsidies from either the Tri-County or the individual counties. Operation, maintenance and upkeep of the facility is covered by the tipping fees charged.

#### Responsible Persons

The Minnesota Pollution Control Agency and the Le Sueur County Solid Waste Officer are responsible to inspect the transfer station. Upkeep, maintenance, etc. are the responsibility of Waste Management.

#### Environmental Considerations

As this is merely a transfer facility and not the final depository for the waste received, there are minimal negative environmental effects from this facility. The waste is received in a covered building and therefore protected from the weather. Land and water

contamination are possible if an accidental spill occurs or if wastes are not properly stored and covered. Surface and groundwater could be affected if water from rinsing out containers or trucks is not properly collected and treated. Since the operation of this facility began, there have not been any environmental threats. This facility is currently in compliance with all county, state and federal regulations.

#### **F. The LJP Enterprises Recycling Transfer Station**

This is a new facility that became fully operational in 2012. In general, the proposed facility will allow the consolidation of three (3) existing LJP recycling and solid waste related businesses into one location in North Mankato, as well as allow for the transfer of MSW construction and demolition debris (C&D), and source separated industrial wastes. It is a permitted transfer facility that will accept up to 270 tons per day of mixed municipal solid waste (MSW) (which is approximately 98,000 tons per year based on a 7-day operation week). Construction and demolition debris (C&D) and certain source separated industrial wastes will also be accepted for transfer, and is included in the above volume. Recyclables such as aluminum, plastics, scrap metals, fluorescent bulbs, paper, appliances, electronics, tires, yard waste, organics, etc. will also be accepted at the facility for processing at a volume of approximately 4,000 tons/month. All transfer operations will take place within a totally enclosed facility. The address of the facility is 2160 Ringhofer Drive in North Mankato, MN. Delivery of MSW, C&D, industrial waste and recyclable materials to be transferred from the facility will be via the vehicle types listed below. Types of vehicles which will be entering and exiting the site:

- ❖ Commercial and MSW refuse and recycling trucks;
- ❖ Transfer truck and trailers; and
- ❖ Passenger cars and trucks (employees, customers, and visitors).

MSW loads will be unloaded on the appropriate tipping floor area and also inspected by the operator. It is estimated that the facility has capacity to receive approximately 75 to 100 vehicles per day and anticipates receiving an average of 60 to 80 vehicles per day.

#### C&D Transfer Operations

The C&D operations will be similar to those for MSW except for the processing of the C&D prior to transfer. As with the MSW, incoming C&D vehicles will enter through the one of the four overhead doors and exit through the same overhead doors. The C&D will also be weighed at the scale and inspected by the facility operator for unacceptable wastes, which would be pulled, isolated, and removed from the transfer station for proper disposal.

Since the facility will accept up to 270 tons per day of C&D, MSW, and source separated industrial waste with no distinction made on maximum daily throughput volumes for any of these waste types, the discussion under Section 2.4.2 for tipping and storage area would apply here. A front-end loader will be used to separate/sort, crush, load the

trailers, and compact the C&D material.

### Recyclables Transfer Operations

Recyclables, cardboard, yard waste and organics will enter the facility through the loading dock doors and be placed in the appropriate concrete bunker area. When a particular bunker is full, the material will be loaded and transferred. It may be baled prior to transfer. It should be noted that scrap steel, tires, appliances and electronics will be kept in bunkers inside the building. A final item for recycling is the removal of liquids from containers which will then be recycled. LJP has a sewer agreement with the cities of Mankato and St. Peter for disposal and treatment of the liquid or it is transferred to the Prairieland Compost Facility in Truman, MN.

### Source Separated Industrial Waste

The source separated industrial waste (i.e. credit cards to be shredded) will be received by van trailers, roll-offs, and self haulers via the loading docks. Once delivered, the material will be moved by fork lift or loader for one of the following:

- ❖ Granulated and sold
- ❖ Compacted and placed in trailer for transfer
- ❖ Baled and shredded.

### Control of Waste

If material that is not accepted at the facility is found, whether C&D or MSW, it will immediately be reloaded and the driver will haul it to a licensed sanitary landfill, demolition disposal facility, or as dictated by the waste type. Measures will be taken to insure that occurrences of unacceptable wastes arriving at the facility are minimized and the handling of wastes, both acceptable and unacceptable will be uniform. Restrictions on acceptable and unacceptable wastes, as specified in Section 2.6, will be made known to all facility personnel and drivers as part of their training. All drivers will be instructed in types of wastes which can be delivered to the facility. As previously stated, the proposed throughput capacity for this transfer facility is approximately 270 tons per day based on average based on a 7-day operational week with a maximum of 500 tons per day, and is not to exceed 98,000 tons per year of MSW which also includes C&D material and any industrial waste accepted at the facility. It is again important to note that the facility expects to receive approximately 4,000 tons per month of recyclables.

### Dependency on Volume

LJP Enterprises Recycling Transfer Station is privately owned and operated and receives most of its waste from private businesses throughout the area. LJP Enterprises has the responsibility to assure that sufficient quantities of waste are received to justify the expense and maintenance of this facility.

### Financial Considerations

The facility is privately owned and operated. It has and continues to receive Port Authority funds from the City of North Mankato. Operation, maintenance and upkeep at the facility is covered by the tipping fees revenues.

### Responsible Persons

The Minnesota Pollution Control Agency and the Nicollet County Solid Waste Officer are responsible to inspect the transfer station. Upkeep, maintenance, etc. are the responsibility of LJP Enterprises.

### Environmental Considerations

As this is merely a transfer facility and not the final depository for the waste received, there are minimal negative environmental effects from this facility. The waste is received in a covered building and therefore protected from the weather. Land and water contamination are possible if an accidental spill occurs or if wastes are not properly stored and covered. Surface and groundwater could be affected if water from rinsing out containers or trucks is not properly collected and treated. Since the operation of this facility began, there have not been any environmental threats. This facility is currently in compliance with all county, state and federal regulations.

### ***G. Blue Earth County Regional Household Hazardous Waste Facility***

The Tri-County's household hazardous waste program assists the general public in identifying, reducing, proper handling and disposal, and using safer or less-hazardous alternatives to household hazardous chemicals. An integral part of the education program is an information service to answer the public's questions and provide technical assistance on proper household hazardous waste management. The Tri-County Solid Waste Office also assists small businesses and agricultural chemical users on the proper storage and disposal methods for their hazardous waste. The Tri-County will provide education to reduce the amount of household hazardous waste generated, and to limit the disposal of household hazardous waste in landfills and/or processing facilities.

Minnesota Statute 115A.96 defines household hazardous waste (HHW) as any waste generated from household activity that exhibits characteristics of or that is listed as hazardous waste under agency rules, but does not include waste from commercial activities that is generated, stored, or present in a household. Household hazardous waste materials have the characteristics of being ignitable, toxic, corrosive or reactive. Household hazardous waste may include pesticides, solvents, preservatives, cleaners, paints and other common household products. These wastes may affect the environment by impairing air quality, or by contaminating soil, surface water or groundwater. If improperly managed, household hazardous waste may be ingested, inhaled, or absorbed through the skin.

The Tri-County and the individual Counties of Sibley, Le Sueur and Nicollet entered into an Agreement with Blue Earth County on February 23, 1993 to co-sponsor a regional

household hazardous waste program. The Tri-County has extended the contract with Blue Earth County to December 31, 2015. Blue Earth County is the sponsoring organization and home to the regional facility. The Tri-County Solid Waste Office works closely with Blue Earth County to assure adequate staffing levels at the regional facility. Tri-County staff work at the regional facility assisting residents, as well as sorting and processing the wastes received. Tri-County staff has received appropriate MPCA, hazard categorization and emergency first aid training and thus are qualified to work at the regional facility and local collection events.

In addition to homeowners, the Tri-County also works with small businesses in our three Counties to help them manage their wastes properly, either through the Regional Blue Earth County's Very Small Quantity Generators (VSQG) program or through a hazardous waste disposal company such as the MPCA State Contractor - Veolia. The Tri-County also works with the Minnesota Department of Agriculture (MDA). The MDA has a waste pesticide program to assist agricultural users and farmers properly dispose of their unneeded and unusable pesticides.

The Tri-County accept these agriculture materials at multiple mobile collections held in all three Counties throughout each calendar year. Blue Earth County also has a contract with the MDA so that pesticide users can take advantage of the disposal options at the Blue Earth County Regional Facility. This assures that pesticide users who cannot wait for the mobile collections to come to their area have a system in place to properly dispose of their unneeded chemicals.

Tri-County educational activities are designed to promote awareness, identification and proper management, and waste reduction methods of household hazardous waste. Staff will promote proper disposal of household hazardous waste. These activities will be carried out through speakers at various organizational meetings, community gatherings and schools, brochures, County Fairs, one-on-one contact and through radio and newspaper advertising.

#### *Collection, Transportation and Disposal of HHW*

Through the Tri-County Joint Powers, Le Sueur, Nicollet and Sibley Counties, have a co-sponsoring contract with Blue Earth County as a part of the MPCAs household hazardous waste program. Blue Earth County has a regional facility that is open seasonally from April through the end of October. The facility is open every Tuesday from 12:00 noon to 6:00 p.m. and the second Saturdays of each month from 8:00 a.m. to 12:30 p.m. Residents from Le Sueur, Nicollet and Sibley Counties can self-haul their household hazardous waste to the Regional Facility at no charge. In addition to the Regional Facility the Tri-County Solid Waste Office holds either one or two mobile collection events in each county every year. Collection sites are rotated around the counties providing all residents convenient opportunities to dispose of their materials.

Table 3.3: Tri-County Participation at the Blue Earth County Hazardous Waste Facility

Jurisdiction	Number of Resident Participants at the Blue Earth County Facility		
	2010	2011	2012
Le Sueur County	336	349	405
Sibley County	29	42	38
Nicollet County	1212	1319	1133

Table 3.4: Tri-County Mobile Collection Events

Jurisdiction	Number of Residents at Mobile Collection Events		
	2010	2011	2012
Le Sueur County	148	139	95
Sibley County	162	206	187
Nicollet County	302	168	145

It should also be noted that Sibley County has a reciprocity agreement with McLeod County for its residents to take hazardous waste materials to the facility in Hutchinson, MN during their business hours. Le Sueur County has a reciprocity agreement with its neighboring Scott County for its residents to take hazardous waste materials to the Scott County facility located near Jordon, MN during its posted business hours. These reciprocity agreements have been very successful due to convenience of geographic location for these County residents and the year around business operation availability.

Table 3.5: Sibley County Resident Participation at the McLeod County Hazardous Waste Facility

Jurisdiction	Number of Resident Participants		
	2010	2011	2012
Sibley County	19	27	74

Table 3.6: Le Sueur County Resident Participation at the Scott County Hazardous Waste Facility

Jurisdiction	Number of Resident Participants		
	2010	2011	2012
Le Sueur County	332	150	291

Tri-County and Blue Earth County staff sort and process the materials received. Useable products that are fairly innocuous in nature (such as latex paint and roofing tars) are checked for quality. Products that are still useable are placed in the product exchange room where they are available free of charge to residents 18 years of age or older. This product exchange area helps to lower disposal costs. Items that cannot be placed into the product exchange area are processed according to MPCA and disposal company requirements.

Once processed the materials are stored in either lab packs or 55-gallon metal containers. Flammable materials (i.e. oil base paints and fuels) are stored behind the facility in one of two flammable storage buildings. After processing all hazardous material containers are appropriately marked. The containers are checked on a weekly basis for leakage or contamination. When enough containers have been accumulated the facility's regional

manager contacts the MPCAs hazardous waste disposal Contractor to have a semi load out /ship out the materials. The particular hazardous waste disposal company may periodically change. However, any disposal company that is used must have appropriate training, licenses and certifications.

### **3.4.2 Description of Land Disposal Facilities In Use**

Despite best efforts at waste processing and conversion of waste-to-energy, or other materials, at this time, nearly all waste processing facilities require a landfill for disposal of the last stage of processing, or for by-pass materials when a facility is closed for maintenance. Landfilling remains at the bottom of the solid waste hierarchy, as the least preferable disposal option, but one still better than promiscuous dumping. The MPCA is in the process of reviewing the enforcement of mandatory MSW processing for the seven county metropolitan areas in Minnesota. It is not known at this time what the impacts of this action may have on the Tri-County Solid Waste integrated system or on the region of south central Minnesota.

Prior to 1993, disposal practices in Sibley, Le Sueur & Nicollet Counties were solely based on landfilling. Communities and businesses in the County contracted with commercial haulers to collect and dispose of mixed municipal solid waste at a local landfill. The majority of MSW generated in the Tri-County was disposed at the Ponderosa Landfill, Spruce Ridge Landfill in Glencoe, MN and the Tellijohn Landfill in LeSueur County which closed in 1993. Since 1993, Tri-County Solid Waste has promoted an integrated solid waste management philosophy that has reduced landfill needs.

#### ***A. Ponderosa Landfill***

The Ponderosa Landfill is owned by Blue Earth County and operated for Blue Earth County under contract with a private operator, Ponderosa Management Company. The Ponderosa Landfill is the only land disposal facility which is part of the Tri-County Solid Waste Integrated Waste Management System as well as an essential component to the resource recovery system because of its role providing dedicated cells for disposal of residue and non-processible materials from the processing of waste from the system, disposed at MWPC. Public entity waste and some commercial waste that is processed by RRT Inc. and the residuals are disposed in the Ponderosa Landfill. The Ponderosa Landfill is also used as the disposal facility for commercial and industrial waste that cannot be processed and some mixed municipal solid waste.

#### **Location**

The Ponderosa Landfill is located near the center of Blue Earth County, approximately six miles southwest of Mankato in South Bend Township, Sections 28, 29 and 32 of T108N, R27W. The site consists of a total 411 acres for the landfill and buffer areas. The Ponderosa Landfill is the preferred land disposal facility for MSW processing residuals in Tri-County Integrated Solid Waste Management Plan.

### Operational History

The Ponderosa Landfill began operating following the authorization of MPCA permit SW-87, issued on August 14, 1972. It was owned and operated by the late Gerald Weimert and his family. The permitted fill area encompassed 66.9 acres within the 200-acre site. Since that time, the Weimert family purchased additional properties in the area as a buffer for the landfill. The Ponderosa has operated continuously since 1973 and has received mixed municipal solid waste, demolition waste, and industrial waste. Currently industrial waste is evaluated for acceptance pursuant to the Ponderosa Industrial Waste Management Plan approved by the MPCA. Following receipt of MPCA authorization in 1976, a clay-lined trench was constructed for the disposal of industrial waste, primarily diatomaceous earth from the Honeymead Products Company in Mankato. This material was placed on the south side of the landfill against the existing waste deposit.

In 1986, the Weimert family sold approximately 42 acres of property located to the southwest of the existing waste deposit to Northern States Power Company (NSP) for the purposes of developing a disposal facility for ash from the Wilmarth Power Plant in Mankato. A retrofit of the Wilmarth Power Plant was completed in 1987 to burn refuse derived fuel (RDF). NRG, Energy Inc., a wholly owned subsidiary of NSP, was responsible at that time for processing and delivery of the RDF. NSP was granted an MPCA permit and a County license to operate the ash monofill in 1991, and constructed a lined cell and began operations in 1992. Currently, NSP operating as Xcel Energy has an agreement with Blue Earth County, through its' contract with the Ponderosa Management Company, LLC (PMC), to operate the ash landfill.

In 1993 the Ponderosa Landfill entered into a long term contract with NRG to landfill the process residuals from the integrated system in a lined, dedicated cell. The first phase opened in fall of 1994. In 1994, after approval from the MPCA in the Permit Reissuance, use of the unlined disposal area at the Ponderosa was discontinued and the lined landfill expansion began, including construction of a leachate collection system with two ponds and a spray irrigation area for the leachate. This was the beginning of a planned seven phase expansion.

The lined expansion area is on the south and west side of the original waste deposit and phases 1, 2, 3, and 6 are a horizontal expansion. Phase 1 was divided into two cells. Cells 1 and 2 are dedicated to the process residuals and non-processable waste from the integrated waste management system. The MSW/Industrial Waste disposal area was developed for mixed municipal solid waste and acceptable industrial waste. Within the MSW/Industrial area, Phase 2 (cells 3 and 4) was constructed in 1995, Phase 3 (cells 5 – 10) began development with construction of cell 5 in 2001. Phase 3 development continued with the construction of cells 0 and 6 in 2004, cell 7 in 2006, cells 8 & 9 in 2008, and cell 10 in 2010. Phase 6 will begin with construction of cell 11 in 2013, and will continue with cells 12 – 15 and is expected to provide disposal capacity through 2023. Phases 4, 5 and 7

are designed as vertical expansions, built over Phases 1, 2, 3 and 6. This vertical expansion will be built against the closed, unlined landfill area using a geogrid to support the new liner system.

In 1995, the final cover for the 27-acre unlined portion of the landfill was constructed. This cover was built to MPCA requirements and included a passive gas venting system. In 2003, the passive vents were closed and an active gas extraction system was installed. Six gas wells in three nests were constructed and connected via an underground header to a flare/blower package to actively pull gas out of the closed landfill area. This system was further enhanced and expanded in 2010 by connecting five of the old passive vents to the extraction system, and adding some wells in the active, lined portion of the landfill.

The flow of waste at the Ponderosa was steady in the 1980s but declined just prior to the time when Blue Earth County purchased the landfill in the mid-1990s. Since that time, waste tonnages have increased again. Waste flow and waste revenue are a function of the local market, as well as economic factors. The following table shows the tons of waste disposed in the Ponderosa Landfill since 1993. The Ponderosa Landfill did not operate a scale until 1997, so the tonnages reported prior to that time are conversions from the landfill's records of compacted cubic yards disposed. The conversion used is 650 pounds/cubic yard.

**Table 3.7: Ponderosa Landfill Tonnage Disposal**

<b>Year</b>	<b>Total Tons Disposed</b>
1993	37,835
2003	25,588
2011	45,623

Originally the Weimert family owned both the Ponderosa Landfill and Kato Sanitation, the major waste hauling company in Blue Earth County. As many of the major hauler consolidations were occurring, Kato Sanitation was sold to Sanifill of Minnesota in 1994. After the purchase of Kato Sanitation, Sanifill began directing much of their waste to Sanifill owned landfills, and away from the Ponderosa. The cash flow at the Ponderosa suffered and Sanifill then offered to purchase the landfill in late 1994. In the NRG/Ponderosa contract, NRG had a contractual Right of First Refusal on sale of the Ponderosa. This was contained in the agreement because of the NRG liability in the landfill cell. NRG felt that the Sanifill proposal was not a valid offer. Blue Earth County felt that the landfill was a significant component of the integrated system and offered to provide 50% of the funding to purchase the Ponderosa with NRG, but NRG refused this offer.

In 1995, there was a significant drop off, approximately 65%, of waste delivered to the Ponderosa Landfill. The Weimert family developed a proposal to sell the Ponderosa to Blue Earth County. Blue Earth County still felt that the Ponderosa Landfill was a key component of the integrated waste management system, was an important facility for industrial waste users in the area, and it was important to prolong the use of the landfill.

Foth and Van Dyke, (since renamed to Foth Infrastructure and Environment, LLC (Foth) a consulting engineering firm, was hired to assess issues involved with Blue Earth County ownership of a landfill in general, and the Ponderosa specifically. The investigation found no major concerns with a Blue Earth County ownership. Negotiations for Blue Earth County purchase of the Ponderosa were completed in September 1996. The purchase included 416 acres of property and the equipment used in the landfill operation. Blue Earth County, using a bid process, selected Teal Resources, Inc. to operate the landfill on a contractual basis. Teal Resources later changed their name to Ponderosa Management Company, LLC (PMC). PMC is still operating the landfill under a contract with the County and is also a co-permittee with Blue Earth County for landfill operations. At the same time, Blue Earth County selected Foth and Van Dyke as the engineering consultant.

Since the purchase of the Ponderosa, Blue Earth County has made numerous improvements to the site and has continued to develop and fill lined waste capacity at the landfill. Improvements to the property which Blue Earth County has made include moving a township road away from the bluff, restructuring the bluff area north of the scale house, installation of a heavy-duty truck scale, replacing the scale house with a new mobile home, and construction of a new equipment maintenance shop. Operational improvements Blue Earth County has invested in since purchasing the landfill include construction and development of seven new lined waste cells, construction of a new storm water holding pond, installation of an active gas extraction system, and installation of a couple of new ground-water monitoring wells.

Blue Earth County has also purchased new equipment for more efficient operation of the landfill, including an Alternative Daily Cover tarping machine, as well as upgrading its two bulldozers and the landfill compactor. Daily operational data, such as waste tonnages, are collected and maintained by the Ponderosa's contract operator, PMC. Annual reports containing this data, as well as environmental monitoring data and other information, are prepared by Foth and the Environmental Services Department and submitted to the MPCA at the beginning of every year. Landfill permitting and operational records are kept on file by the MPCA and the Environmental Services Department.

#### Permitted Capacity

The MPCA issued a solid waste permit to the Ponderosa Landfill in 1972. The original airspace capacity was 2,952,000 cubic yards (including cover material). The Ponderosa has gone through several re-permitting processes since it began. Only a portion of the approved original fill area was used for disposal from 1972 to 1983. In 1984, in conjunction with state-wide landfill re-permitting activity, plans for the Ponderosa were revised and submitted to the MPCA, and a five year operating permit was issued. The revised engineering plans submitted with these re-permitting documents transferred the airspace capacity from the unused horizontal deposit area to vertical airspace above the initial phases. The total authorized landfill airspace for the Ponderosa was not changed. In

June 1989, a re-permitting application was submitted to the MPCA for another five year operating period.

The re-permitting documents presented detailed engineering plans and reports for completion of filling within the existing waste deposit. The MPCA did not grant the Ponderosa a new permit and the Ponderosa Landfill operated "under the discretion" of the MPCA. In 1992, the Ponderosa notified the MPCA of their intent to install a lined system for horizontal expansion. The re-permitting information submitted in June 1989 was out-of-date, and new information was submitted to the MPCA with the plans to install a liner and leachate collection system in the portion of the landfill permitted for horizontal expansion

On March 27, 2013, the MPCA reissued a permit for the Ponderosa Landfill. The new permit increased the permitted capacity by 1,196,700 cubic yards and the ultimate design capacity by 1,163,900 cubic yards to a new permitted capacity of 4,148,700 cubic yards and an ultimate design capacity of 5,312,600 cubic yards (including, daily, intermediate, and final cover) of industrial, demolition debris and mixed municipal solid waste. The total permitted fill footprint covers 59 acres, of which 27 acres is the old unlined facility, and 32 acres will be lined.

The permit included permission for land application of leachate, and leachate recirculation as leachate management tools, and an active landfill gas extraction system. The lined portion of the landfill includes existing phases 1, 2, and 3, which include eight (8) MSW/industrial cells, and two (2) MSW process residue cells dedicated to residual waste from the County's resource recovery system. The lined portion also includes the newly permitted Phase 6, which is a 12.4 acre footprint expansion to the north and west of the existing lined area, segmented into cells 11 - 15. Not included in the current permit, but added as ultimate design capacity are Phases 4, 5, and 7. These Phases would not be a footprint expansion, but rather a vertical expansion above existing waste footprint and will be available for permitting when the existing permitted area is nearing capacity.

#### Available Capacity/Life Expectancy

According to the 2012 Ponderosa Landfill Annual Operating report, in-place volume calculations indicated that 2,577,318 cubic yards of the design capacity had been utilized as of November, 2012 leaving a design capacity for the site of 374,682 cubic yards. At current operating rates, a little more than five years of designed airspace remains for the site. However, much of this airspace is reserved for the RRT residual cells 0 and 1, so that current design plans will run out much sooner. In 2012 the County submitted a permit application to the MPCA requesting an additional 1,196,700 cubic yards of airspace (phase 6), scheduled to last through the ten year permit cycle. The permit also requested additional design capacity of 1,163,900 cubic yards (phases 4, 5, and 7). The resulting total ultimate design capacity of 5,280,300 cubic yards is expected to last at least 20 years.

Additional property surrounding the existing waste fill area belongs to the facility, and provides potential disposal capacity for many years to come.

#### Permit Status

The MPCA originally issued a permit to Mr. Gerald Weimert on October 3, 1972, to construct and operate a 27 acre solid waste disposal system with a capacity of 2,214,000 cubic yards. In 1973, the permit was increased to permit the inclusion of a clay-lined trench for industrial waste. The MPCA reissued the permit on November 20, 1984, and June 7, 1994. The 1994 application included design plans for a 12.3 acre lined disposal area, bringing the total disposal area equal to 39.3 acres at the facility. The MPCA issued a minor modification on July 15, 1997, to approve a change-of-ownership from Mr. Stephen Weimert to Blue Earth County. On December 7, 1998, Blue Earth County submitted a re-permitting application, with subsequent submittals dated December 1, 2000, and November 10, 2003. The November 10, 2003, submittal incorporated Cell 0 into the landfill design, which changed the disposal area to 13.4 acres.

The facility was again re-permitted by MPCA on June 14, 2004, and July 25, 2008. In July of 2012, Blue Earth County submitted a permit reissuance application requesting a footprint increase of 12.4 acres, expanding the footprint of the lined disposal area to 32 acres, and the footprint of the total waste disposal area to 59 acres. The permit request was to increase the permitted disposal capacity to 4,148,700 cubic yards, and increase the ultimate design capacity to 5,312,600 cubic yards. This permit request was authorized, and the permit issued in March of 2013. This existing permit is currently in force until March of 2023.

#### Degree of Development of Technology

The Ponderosa Sanitary Landfill is a lined facility and meets all County, state and federal requirements.

#### Dependency on Volume

The Ponderosa Landfill has an agreement with NRG, Energy to dispose of all residuals for waste processed from Blue Earth, Nicollet, LeSueur and Sibley Counties. This is the only long term agreement for a waste stream at the Ponderosa.

#### Financial Considerations

The Ponderosa Landfill operates as an enterprise fund within the Blue Earth County financial system, under its own budget. The capital and operating budget for the Landfill is based on the needs of the facility and the incoming revenues.

The Ponderosa Landfill was purchased by Blue Earth County in 1996 for \$2.0 million. The purchase agreement included the landfill, buffer land, all associated equipment and buildings and the transfer of the contract with NSP for the placement of ash in the NSP-owned ash monofill. The agreement included a \$500,000 down payment with the

remaining \$1.5 million paid in monthly payments over 10 years at 7% interest. The down payment was made from funds collected as fees placed on the landfill by the County when it was privately owned.

The monthly payments are generated from tipping fees collected at the landfill. The monthly payments were completed in 2007. The source of funding for the operation of the Ponderosa Landfill is also made solely through tip fees for waste delivered to the Landfill. There is no funding from County budgets. The three highest operational costs are the contractor operation of the facility, consulting engineering and environmental monitoring. Funding from tip fees is set aside for financial assurance and future costs such as cell development.

The 1993 tip fee was \$11.00 per cubic yard or approximately \$35 per ton. This rate increased after the lined facility opened in 1994, to \$45 per ton. This base rate has not been increased since that time, but the pricing structure has been diversified in several other ways: Cash customers are charged \$0.03 per pound, and Asbestos Containing Materials have higher rates, depending if the asbestos is friable or non-friable. There is also a per unit charge for Bulky items, i.e. mattresses, box springs and some other furniture items. Wastes that are collected at the landfill but hauled elsewhere for processing/recycling include tire, appliances and electronics waste.

The MPCA has approved the Ponderosa Landfill's Financial Assurance Plan, and the balance, as of 12/31/2012, was approximately \$ \$2,290,000. Each year the Financial Assurance Plan is updated and submitted to the MPCA as a part of the annual report.

### Environmental Considerations

There are potential environmental and public health impacts associated with landfilling. These can include groundwater contamination and methane explosion. The lined cells at the Ponderosa Landfill meet both Minnesota solid waste regulations and EPA Subtitle D regulations. These regulations require Landfill liners and leachate collection systems, gas venting, and quarterly monitoring of Landfill gas, leachate and groundwater. The Ponderosa's active gas extraction system was installed proactively to deal with potential gas issues at the landfill. The enhanced engineering and rigorous monitoring of these sites reduces the chance and magnitude of any environmental impacts. The Ponderosa Landfill leachate is collected and treated on-site by aeration and land application.

The existing groundwater monitoring system of the Ponderosa consists of monitoring wells placed upgradient and downgradient from the fill area. Three nearby residential wells are also sampled as part of the quarterly sampling requirements. A groundwater and surface water compliance boundary has been established for the Ponderosa Landfill. Oversight of the groundwater monitoring network is the responsibility of the MPCA, and the MPCA and Blue Earth County routinely inspect the Ponderosa Landfill and has historically found few operating problems. Each January Blue Earth County submits, to the MPCA, an annual

report on the Ponderosa Landfill that includes all the environmental monitoring information collected during the previous year.

The removal of problem wastes at the Ponderosa Landfill is addressed in several ways. The landfill has a scale attendant whose responsibility is to inspect loads as they are brought in. Any hazardous or unacceptable materials are sent back with the hauler for proper management. Any unacceptable waste found on the working face is collected and properly stored for disposal if the waste is not traceable to a hauler or generator. The landfill has areas designated for the proper storage of any appliances, tires and hazardous materials found at the facility. Any hazardous wastes that are found are managed by County staff through the Blue Earth County Regional Household Hazardous Waste Program.

***B. Spruce Ridge Landfill***

The Spruce Ridge Resource Management Facility (SRRMF) Landfill is a private landfill owned and operated by Waste Management Inc. (WMI) near Glencoe Minnesota. It is not part of the integrated waste management system used by Tri-County Solid Waste. However, it plays a role in solid waste planning for the Tri-County because it is a depository for much of the non-public entity waste hauled from the Counties by the area’s largest hauler, WMI. The SRRMF also serves numerous out-State Counties as well as metro Counties.

The SRRMF, SW Permit SW006, was formerly known as the McLeod County Landfill, is located six miles northwest of Glencoe, MN along State Highway 22. It opened in 1971. The SRRMF is 540 acres in size, and accepts 325,000 tons of waste per year. Its life expectancy is 40 years. Leachate is collected and recirculated through portions of the landfill to encourage bioreactivity. Landfill gas is actively extracted via piping throughout the landfill and piped to a gas-to-energy plant, which is then sold to Glencoe Utility Company. Enough electricity is generated to power approximately 500 homes. The quantities of mixed MSW received and disposed at the SRRMF for the last five years are shown in Table 3.8.

**Table 3.8: MSW Tons Disposed at SRRMF, 2007-2011<sup>13</sup>**

	Years				
	2007	2008	2009	2010	2011
<b>Total Tons</b>	162,255	149,340	147,241	152,434	209,840

The decrease in tons disposed between 2007 and 2010 is most likely due to the economic downturn. The increase in tons disposed in 2011 can be attributed to economic recovery as well as the SRRMF receiving waste from Anoka and Stearns Counties as well as an increase in tons received from Hennepin County.

The SRRMF operates an on-site collection center for problem wastes (i.e., tires, appliances, electronics, C&D debris, etc.) as well as recyclable materials. No processing of these materials (other than bulking/baling) occurs at the SRRMF. It is the Tri-County intent to reduce the amount of waste generated within our three Counties in an effort to

extend the life of the SRRMF and ensure it will be a continued resource for the regional area.

The McLeod Landfill was established in the early 1970's by two private individuals, and provided basically local service through the mid 1980's. At that time it was expanded and changed its name. The SRRRMF was purchased by Sanifill, Inc. in 1992. It opened its first lined cells in 1993, and through a series of mergers and buyouts came into the hands of WMI. The facility has a total permitted capacity of 12,500,000 cubic yards. A draft permit allowing development of 6,399,000 cubic yards of air space over a composite liner is currently being finalized. Waste is received at the SRRRMF from greater Minnesota and metro area counties.

Within the last 5 years, waste flows have fluctuated somewhat but have generally averaged around 180,000 tons of waste annually, including MSW, industrial, and C & D waste. The SRRRMF operations include a lined facility equipped with leachate collection system and gas venting equipment. Collected leachate is currently recirculated or trucked to Pigseye Wastewater plant for treatment. Methane gas is currently vented to the atmosphere, or flared off, although plans are being considered for the active extraction of gas for utilization as a fuel or power source. Sixteen groundwater monitoring wells are in use and in compliance with MPCA requirements. Financial assurance for closure/post-closure care and contingency action has been secured through a letter of credit.

### ***C. Brown County Landfill***

The Brown County Landfill (BCL), is a public landfill owned by Brown County and operated under contract by Mathiowetz Enterprises, Inc. It is located approximately ten miles southwest of New Ulm, MN on CR 11. The BCL does not officially accept out-of-county waste, but does play a role in the Tri-County solid waste system. Waste collected on the western fringes of the Nicollet and Sibley Counties may find its way to the BCL with other waste loads.

The BCL opened in 1972 under the private ownership of Mathiowetz Enterprises, Inc. In 1986, Brown County purchased the landfill, assuming all liability for past and future environmental considerations.

The present site includes 27 acres of lined fill area, 17 acres of unlined closed fill, and 1,814,000 cubic yards of total permitted capacity within 80 acres of property. Conceptual development plans to fully utilize the landfill site, subject to future landfill rules and permitting, would extend the landfills life beyond the next twenty (2) years. Available documentation indicates that groundwater monitoring wells in place are sufficiently positioned to detect any impact plumes from the landfill. No impacts had been detected. Old, unlined trench-and-fill areas were situated on a natural blue-clay bottom, with 25' of separation to the water table. Leachate from the lined fill area is collected and aerated, then sprayed on an irrigation area for uptake. Methane gas generation has been monitored

and is currently handled through a passive venting system. Financial assurance measures for closure/post-closure, and contingency action comply with MPCA guidelines.

### 3.4.3 Cost of Operating and Maintaining Tri-County's Integrated Solid Waste Management System

Tri-County's integrated solid waste management system comprises of facilities located within and outside of the Tri-County service area. Tabled 3.9 and 3.10 present the 2011 line item cost of operating and maintaining the Tri-County system as well as that of the individual counties. A total of \$276,972 was spent on Tri-County's solid waste integrated system for the year 2011. More than 50 percent of this amount was spent on the recycling program and on Staff and Administration/Benefits. In addition, this total cost represented \$9.11 gross cost per household and \$3.74 gross cost per ton of MSW generated for 2011. With the exception of Sibley County, the two remaining counties have higher cost estimates than that of the Tri-County. All three Counties in 2011 as shown in Table 3.10 also had higher gross cost per household and gross cost per ton of MSW generated.

Generally, tipping fees usually cover these operation and maintenance costs. The operation and maintenance cost of some programs are financially supported by Tri County and some programs are supported by the individual Counties. Nicollet County pays for recycling using their solid waste fund. The Tri County pays for the recycling contract with Waste Management for Le Sueur and Sibley Counties and also pays for the HHW program for all three counties.

Table 3.9: 2011 Operation and Maintenance Cost for the Tri-County's Integrated System

Cost Item	Cost	
	Amount	% of Total
Waste Education/Source Reduction	\$11,162	4.0%
Recycling	\$83,747	30.2%
Yardwaste Management	\$1,000	0.4%
Household Hazardous Waste Supplies	\$1,993	0.7%
Household Hazardous Waste Staffing	\$28,376	10.2%
Hazardous Waste Collection Contractor	\$11,591	4.2%
Household Hazardous Waste Disposal	\$26,810	9.7%
Demolition Waste	\$1,000	0.4%
Special Wastes	\$8,433	3.0%
Administration	\$91,963	33.2%
SCORE Planning, Oversight & Adm.	\$4,897	1.8%
HHW and problem materials management	\$6,000	2.2%
<b>Total Cost</b>	\$276,972	100.0%
<b>Gross cost per HH per year:</b>	\$9.11	
<b>Gross cost per ton MSW generated</b>	\$3.74	

Table 3.10: 2011 Operation and Maintenance Cost for Le Sueur, Nicollet and Sibley Counties

Cost Item	Cost Estimates					
	Le Sueur County		Nicollet County		Sibley County	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
Waste Education/Source Reduction	\$2,758	1.1%	\$4,264	1.2%	\$3,541	1.7%
Recycling	\$67,579	26.3%	\$195,113	55.8%	\$68,406	32.7%
City Yardwaste Management Operations	\$500	0.2%	\$500	0.1%	\$14,000	6.7%
Household Hazardous Waste Admin	\$6,247	2.4%	\$6,785	1.9%	\$4,531	2.2%
Demolition Waste	\$500	0.2%	\$500	0.1%	\$500	0.2%
Special Wastes	\$33,796	13.2%	\$20,279	5.8%	\$29,675	14.2%
Administration	\$123,532	48.1%	\$94,848	27.1%	\$68,259	32.6%
SCORE Planning, Oversight & Adm.	\$4,021	1.6%	\$4,870	1.4%	\$3,870	1.8%
HHW and problem materials management	\$17,789	6.9%	\$22,260	6.4%	\$16,511	7.9%
<b>Total Cost</b>	<b>\$256,722</b>	<b>100.0%</b>	<b>\$349,419</b>	<b>100.0%</b>	<b>\$209,293</b>	<b>100.0%</b>
<b>Gross cost per HH per year:</b>	\$23.54		\$26.12		\$34.10	
<b>Gross cost per ton MSW generated</b>	\$10.36		\$9.66		\$15.86	

### 3.5 SUMMARY OF ACHIEVEMENTS, OPPORTUNITIES AND CHALLENGES

The existing regional integrated waste management system is a collection of public and private entities working together for the best locally available integrated management of solid waste. It includes numerous programs provided by the Tri-County as well as privately operated programs:

#### 3.5.1 Achievements and Opportunities

- ❖ Tri-County Solid Waste education programs provide all citizens the best available means of managing waste, including waste reduction and abatement, i.e. “reduce, reuse, recycle”.
- ❖ The recycling contract between Le Sueur & Sibley Counties with Waste Management.
- ❖ The recycling agreement between Nicollet County and the City of North Mankato for Nicollet County rural recycling program.
- ❖ Tri-County Solid Waste recycling programs reduce waste volume by providing opportunity to citizens and businesses to reducing and recycling any materials they deal with on a day to day basis.
- ❖ Tri-County Solid Waste in a partnership / contract with Blue Earth County’s Regional Household Hazardous Waste Facility provides a Household Hazardous Waste Program for its citizens, a VSQG (Very Small Quantity Generator) for Businesses and a Agriculture Waste (Herbicide / Pesticide) disposal program in conjunction with the Minnesota Department of Agriculture programs seek to reduce the toxicity of the remaining waste, and reduce waste volume by proper management and reuse of these associated hazardous wastes.
- ❖ The Household Hazardous Waste reciprocity agreement between Sibley and McLeod County.

- ❖ The Household Hazardous Waste reciprocity agreement between Le Sueur and Scott County.
- ❖ The Minnesota Waste Processing Company (MWPC) accepts Municipal Solid Waste (MSW) for processing into Refuse Derived Fuel (RDF). This material is then shipped to the RRT Newport RDF Facility in Newport, South Saint Paul, MN.
- ❖ The RRT Newport RDF facility processes the majority of the household “Public Entity” MSW in the region into refuse derived fuel (RDF) for fuel for resource recovery facilities. Processed RDF fuel from Newport is shipped back to MWPC in Mankato.
- ❖ The Wilmarth Resource Recovery facility, owned and operated by Xcel Energy, receives the processed RDF fuel from MWPC via a conveyor running from MWPC to Wilmarth. The Wilmarth Resource Recovery facility burns the RDF fuel to produce electricity, converting the waste into electrical power for southern Minnesota.
- ❖ The Ponderosa Landfill, owned by Blue Earth County, provides waste disposal space for non-processible and residual waste from the RDF processing facilities. It also provides disposal space for local residents and businesses not using the resource recovery system available at MWPC.
- ❖ The Xcel Energy Ash Landfill, located adjacent to the Ponderosa, is owned by Xcel Energy and provides disposal capacity for the ash produced by the burning of RDF.
- ❖ Other related facilities include the newly permitted Full Circle Organics Source Separated Composting facility, which has recently begun composting separated organics waste from local businesses, the Hansen Demolition & Recycling station and the SMC Pilgrim’s Demolition Landfill, accepting demolition waste from area businesses and homeowners.
- ❖ GreenTech Recycling has added electronic waste processing in addition to its appliance processing for all three special county collections.
- ❖ The “Take it to the Box” program implemented in all three Counties to reduce unused prescription drug medication from being improperly disposed of.
- ❖ The Xcel Wilmarth facility agreement to receive and dispose of prescription medication from the Tri-County Sheriffs Offices for free disposal.
- ❖ The expansion of the “Message in the Bottle” program into all three Counties.
- ❖ Ag Bag proper disposal and recycling pilot program in Sibley County.
- ❖

### **3.5.2 Challenges**

The challenges throughout the Tri-County are fairly common ones that most Counties in Minnesota seem to encounter. The goals, strategies and programs developed for this ten-year planning period addresses all these challenges. These challenges can be summed up to the following items:

- ❖ Location of integrated waste management service provided to the end user or County resident.

- ❖ Availability of hours of operation for use or disposal of materials.
- ❖ Lack of information, education especially for minorities or new residents in the area.
- ❖ Available funding of specific programs (education or service oriented) provided by the Tri-County and each individual Counties.
- ❖ Affordability of service – some residents are financially challenged to afford proper service to dispose of or recycled materials (i.e low income residents)
- ❖ Lack of convenience of service which is not conducive to performing good habits or abiding by State Statutes to dispose of or recycle certain waste stream properly. i.e. lack of proper or separate collection bin for recyclables such as pop cans and bottles at gas stations.
- ❖ Lack of convenience to promote recycling at apartment buildings. New apartment building as well as commercial building need to be built with these services in mind by providing room for proper containers.
- ❖ Building Contractors and other businesses need to be educated in services provided as well as State Statutes when disposing of materials.

### **3.6 PROPOSED INTEGRATED WASTE MANAGEMENT SYSTEM**

Tri-County Solid Waste currently uses a mature integrated solid waste management system and does not foresee changing the components significantly unless major developments occur with the Ramsey / Washington Counties and RRT negotiations or other viable technology becomes available and is approved by the MPCA. Minnesota Statute 115A.02 outlines the goals of integrated waste management and defines the solid waste management hierarchy. Tri-County Solid Waste’s existing integrated waste management system as outlined in the previous section is consistent with the Solid Waste Hierarchy and with Minnesota Statute 115A.02.

One component that has recently been added to the existing integrated system, however, is a source separated organics composting site, constructed and operated by Full Circle Organics. As of the spring of 2013, this facility located outside of Good Thunder, MN was only recently permitted and constructed. Operation began in March of 2013, so it remains to be determined how successful this facility will be. Tri-County Solid Waste along with Blue Earth County will support and encourage the use of this facility as consistent with integrated waste management principles and with the existing integrated waste management system. The focus of Tri-County Solid Waste is to maintain all public entity waste currently going into the existing system to remain there and to encourage more private waste into the system as well. The system includes source reduction, reuse, recycling, and resource recovery, and landfilling as a last resort.

Table 3.11 presents the goals and strategies identified by stakeholders towards the improvement of the existing system. Programs to be implemented under each goal and strategy (including implementation schedules) are presented in the form of Project Planning Matrices (PPMs) in the next chapter.

Table 3.11: Goals and Strategies Proposed to Improve the Integrated System

Management Area	Goals	Strategies
<b>Source Reduction</b>	Explore avenues to encourage residents and businesses to reduce their solid waste.	Work with businesses and their manufacturing suppliers to demonstrate options for reducing waste generation. Encourage Product Stewardship Programs.
		Promote volume-based pricing to give generators of waste a clear incentive to reduce the amount of waste generated
		Provide educational material to residents and businesses that explain methods of reducing solid waste generation.
<b>Waste Education</b>	Develop and implement a comprehensive waste management education strategy.	Raise public awareness on solid waste best management practices (BMPs).
		Build news coverage of specific programs into wider coverage of waste management programs, recycling opportunities, and the benefits of reducing the amount of waste produced.
	Educate students of all ages, residents and businesses on how, when, and where solid waste can be recycled.	Continue education on source reduction, with special emphasis on toxicity reduction.
		Continue to meet and discuss waste issues with civic and business groups, cities, and school groups K-12.
	Educate residents and businesses on how, when, and where to properly dispose of hazardous waste.	Develop educational materials for residents and businesses that explain how, when, and where to properly dispose of hazardous waste.
		Raise public awareness on hazardous waste issues and dangers.
<b>Recycling</b>	Significantly increase the recycling rate for all three counties within the next ten years. Conduct more recycling programs/ events with & for our schools, 4H Groups, Boy Scouts, Girl Scouts and Church Groups.	Encourage recycling education efforts.
		Increase the participation rate of residents (especially rural ones) and businesses in recycling programs by promoting examples that have been working such as the program that Granby & Nicollet Townships have with a hauler and make recycling options more accessible.
		Work with and incentivize businesses to report data on recycling patterns to their county.
<b>Yard Solid Waste Management</b>	Comply with state restrictions on the landfill of yard waste.	Explore alternatives in enforcing restrictions on the landfill of yard waste.
	Educate the public on options for managing yard waste.	Continue to educate and encourage consumers on back yard composting and proper disposal of yard waste.
<b>Source Separated Organic Materials</b>	Provide improved options for the collection and disposal of source separated organic materials.	Educate residents and businesses on the options available for the collection and disposal of source separated organic materials.
<b>Solid Waste Incineration and Energy Recovery</b>	Recover/discover more resources from the solid waste stream in all three counties.	Maintain existing system and seek out new partnerships with waste-to-energy (WTE) facilities.
	Meet current capacity needs at the Resource Recovery & Waste to Energy Facilities.	Continue to process waste to make RDF and deliver to energy recovery facilities.
		Ensure the current needs of the WTE integrated system are being met by acquiring RDF from neighboring counties.
<b>MSW Land Disposal Facilities</b>	Support MPCA initiatives to document landfill air emissions and the long-term	Embark on a collaborative effort with neighboring counties on monitoring landfill facilities and assessing future costs and impacts.

Management Area	Goals	Strategies
	impacts and costs of landfilling to support future policy decisions.	Encourage the MPCA to adopt a requirement for landfills and transfer stations to conduct waste characterization studies to identify opportunities to divert waste.
	Explore alternative means of reducing and disposing of waste not suited for RDF in order to discourage land disposal.	Identify and prioritize environmentally-friendly methods for the disposal of waste not suited for RDF.
<b>Solid Waste Tire Management Programs</b>	Reuse or recycle waste tire material into other useful products.	Promote existing tire collection options to residents and businesses.
	Enhance tire disposal education efforts.	Prevent waste tires from being illegally disposed of in woods, ditches, and other rural areas.
<b>Electronic Products</b>	Assure a clean and healthy environment by preventing the illegal disposal of electronics in lakes, woods, ditches, and other rural areas.	Educate students, residents and businesses on the benefits of the proper disposal of electronics.
	Comply with state laws on electronic products recycling and disposal.	Use enforcement tools to ensure proper disposal of electronic products.
<b>Major Appliance Management</b>	Assure a clean and healthy environment by preventing the illegal disposal of appliances in lakes, woods, ditches, and other rural areas.	Educate residents and businesses on the benefits of the proper recycling of appliances. Work with and inform Lake Association Groups of disposal options
	Comply with state laws on appliance recycling and disposal.	Use enforcement tools to ensure proper recycling of appliances.
<b>Automotive Mercury Switches, Motor Vehicle Fluids And Filters, And Lead-Acid And Dry Cell Batteries</b>	Promote environmentally friendly and health-hazard free options for disposing automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries.	Provide residents and businesses with convenient collection points for the disposal of automotive mercury switches, motor vehicles fluids and filters, and lead-acid and dry cell batteries.
	Comply with state laws regarding the disposal of automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries	Promote drop-off sites and ensure that automotive service businesses comply with regulations regarding the disposal of automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries.
		Prevent mercury from being disposed of in a manner that is not environmentally friendly or conducive to public health.
		Prevent batteries from being disposed of in a manner that is not environmentally friendly, is not conducive to public health, or precludes the possibility of proper recycling.
<b>Household Hazardous Waste Management</b>	Educate residents and businesses on the benefits of the proper disposal of HHW products.	Develop educational materials that discourage the purchase of HHW products and encourage the reuse of existing products and the proper disposal of unwanted HHW products.
		Encourage residents and businesses to properly

Management Area	Goals	Strategies
		dispose of household and business hazardous waste products.
	Increase separation and management of materials containing lead, mercury, and PCBs from the waste stream.	Design and implement a program to reward businesses that don't sell products containing lead, mercury, or PCBs.
<b>Demolition Debris</b>	Provide residents and businesses with opportunities for the disposal of demolition debris.	Encourage residents to properly dispose of demolition debris.
	Ensure that contractors abide by state and federal regulations regarding the disposal of demolition debris. Also educate contractors on the practice of recycling asphalt shingles.	Educate contractors on state and federal regulations regarding the proper disposal of demolition debris.
<b>On-site and Illegal Disposal</b>	Increase participation of rural residents in the waste management system.	Educate residents of other options and remove barriers for self-haulers. Conduct Pilot Projects of drop-off sheds located at rural Township Halls.
	Use enforcement to discourage illegal dumping practices, especially in lakes, woods, ditches, and other rural areas.	Provide opportunities and incentives for rural residents to properly dispose of toxic waste products.

### 3.6.1 Alternatives to the Proposed Integrated Waste Management System

The Tri-County's matured integrated waste management system is working to meet the goals and policies of this plan as well as meet the MPCA preferred waste management plans. The fate of the current system will largely be decided by what occurs in the coming years between Washington & Ramsey Counties, RRT (the current owner of the Newport processing facility and Xcel Energy – owner of the Wilmarth waste to energy facility). Currently Washington & Ramsey Counties have a processing Agreement with RRT through 2015. This agreement includes an exclusive option to purchase the facility if RRT decides to sell, decides to stop using the facility to process waste or defaults on the agreement. There is an unconditional exclusive option beginning January 1, 2015 through that calendar year. If the Ramsey & Washington Counties exercise the option in 2015, RRT has the right to reject the purchase. If they do, then the Agreement automatically extends two years through 2017; RRT must meet its obligations and guarantees; and the Counties have a right of first refusal during the extended term.

If the current resource recovery system dramatically changes after 2015 or other emerging technologies are approved by the MPCA as being able to meet the goals and policies stated under MN Statute 115A for processing solid waste materials, the Tri-County would then consider the options available at that time and work with the MPCA to continue preserving its solid waste processing goals. During that time, the Tri-County would continue to promote the solid waste management hierarchy of preferred methods of reduce, re use,

recycle and household hazardous waste management in order to maximize environmental benefits. The Tri-County would also proceed with an evaluation and preliminary planning process for waste management options of the following alternative technologies that are emerging.

1. Gasification – A thermal process that converts solid waste to a synthetic gas (syngas), using limited amounts of air or oxygen.
2. Pyrolysis – A thermal process that breaks down solid waste without air or oxygen and uses heat to produce syngas.
3. Plasma arc – A process that uses very high temperatures (5,000 to 13,000 degrees Fahrenheit) to breakdown waste into elemental byproducts,
4. Mass Burn Waste-To-Energy – A process that burns solid waste in a combustion chamber, without presorting of waste components, and recovers heat energy.
5. Anaerobic Digestion – A process that decomposes the organic (carbon-based) portion of solid waste in the absence of oxygen, producing syngas or natural gas, and a digestate with a liquid and solid component.
6. Mixed Waste Processing – MWP – Also known as “front-end separation,” this is a process that removes recyclable materials from mixed solid waste; it can either be stand-alone or be part of a front-end process before another technology.
7. Plastic to Fuel – A heat and distillation process to convert various plastics into oil.

The type and amount of mixed municipal solid waste available in the future needs to be considered when reviewing applicable technologies. Projecting waste volumes takes into consideration the changes likely to occur in the solid waste system, with increased levels of recycling and separate management of other wastes such as organic waste. The waste composition over time is expected to change as well, with reduced volumes of recyclable paper, glass, metal and organics. The type and amount of materials that are discarded in the Tri-County depends heavily on a number of factors, such as changes in population, the economy, consumer habits, and types of commercial industry development. When comparing these technologies the Tri-County should consider the following parameters:

- ❖ Whether the technology is proven in North America
- ❖ Is there available documented system cost information
- ❖ MPCA permitting a new technology & due diligence process time frame
- ❖ Present system flexibility and in the years to come
- ❖ Will the technology be applicable to the Tri-County solid waste characteristics

Should there be a dramatic negative change of circumstances to the current integrated waste to energy where perhaps the processing of solid waste is hampered or becomes financially unstable and the Tri-County only recourse is to consider other technologies more landfilling may become an unfortunate short term side effect. This term would only last until other processing technologies(s) would become approved by the MPCA as meeting the goals and policies under MN Stat 115A.

### **3.7 BARRIERS TO ACHIEVING GREATER INDEPENDENCE FROM LAND DISPOSAL**

Lack of proven technology and or financially affordable technology could be considered a main barrier to prevent more or continued land disposal. There are currently technologies that are still being refined and perfected, they then have to become commercially available to the masses and at about the same time, reach a scale of economies which can make the technology affordable to the masses and further develop end markets for products created from the new process. The list of challenges mentioned in the above section 3.4.2 could also be considered somewhat barriers as well.

Certainly lack of funding to private business to conduct pilot programs/projects to get these new technologies off the ground can also be considered a barrier. The lack of funding to government programs could also be applied here. Many Counties have limited funding available to expand recycling programs to more rural areas or work with private business to develop future technologies or markets for their products. The lack of flow control or tools to easily implement flow control methods can also be considered a barrier to achieving landfill independence.

Lastly, specific legislation or lack thereof can be considered a main barrier. One need not look any further than the electronic waste (e-waste) / CRT ban and what has transpired in the electronics markets and associated commodities markets. Product stewardship legislation models can work if done properly when all vested parties are invited to the table.

#### **3.7.1 Reasons for the Continued Use of Land Disposal System**

Landfills continue to play a role in the solid waste system for the Tri-County area. Although land disposal is the least preferred option in the solid waste management hierarchy, an integrated waste management system requires that some landfill capacity be available. This Tri-County Solid Waste Plan acknowledges that landfills are necessary and that landfill capacity is needed because 100% of the waste cannot be reduced, reused, recycled or processed. Newer technologies such as leachate recirculation, bioreactors and landfill mining provide opportunities to improve landfill management, but need to first be evaluated and then designed in a manner that prevents negative environmental outcomes. Ultimately, conservation of landfill space and the use of new technologies should be encouraged, but only when they also provide for optimal environmental protection.

Landfills that serve the Tri-County service area are both privately and publicly owned and operated. Tri-County and its Governmental partners should therefore specifically focus on the regulatory issues that govern landfilling; landfill design and operation in Minnesota is regulated by the MPCA, counties and cities. This Tri-County Plan stresses the need for landfills to be designed and operated in an optimal manner while also recognizing that landfills as well as all other waste facilities' operations will need to be expanded or changed in the future to achieve the Tri-County Solid Waste Plan objectives.

Affordability is mostly likely the other main reason for continued landfilling. Landfilling has historically been the cheapest means to dispose of unused or no longer needed materials. In addition, as private businesses have heavily invested in landfills, they have become vertically integrated in the solid waste markets from trucking, to transfer station and to owning landfills. These are capital investments that must be paid for by continued / future business contracts to continue to receive solid waste materials. It is our hope that future technologies and product stewardship models will lead to more price competitive option to land disposal.

## CHAPTER FOUR – SOLID WASTE SYSTEM EVALUATION AND TEN YEAR IMPLEMENTATION PLAN

### 4.1 INTRODUCTION

Minnesota Statutes §115A.46 subd. 2 specify that County Solid Waste Plans are to properly document how they will achieve set goals. In reaction to this Statutory provision, this section outlines the goals, strategies and programs specified in Minnesota Statutes §115A.411, subd. 2. The goals, strategies and programs are focused on meeting the 10-year solid waste management targets determined in the Goal-volume table (see Appendix 1 for the Goal-volume table). Appendix 2 also provides a detailed budget for Tri-County’s 10-year solid waste management plan.

Table 4.1 specifies the targets to achieve by the end of the plan period (10 years). Since MN Statute §115A.02 places more emphasis on reduce, re-use and recycle options for solid waste management, the targets are also set to reflect as much as possible, the spirit and intent of this statutory provision.

Table 4.1: MSW Management Targets for the Next Ten Years

Solid Waste Activity	Existing Levels			10-year Target		
	Le Sueur	Nicollet	Sibley	Le Sueur	Nicollet	Sibley
Resource Recovery	6,955	9,621	774	8,050	11,125	1,145
Residential Recycling	932	2,046	565	1,786	3,789	885
Commercial / Industrial Recycling	4,366	13,142	624	5,486	15,155	997
Compost (Organic Recovery)	3,035	175	4,200	4,032	1,894	4,401
Landfilled	6,586	7,413	5,572	4,701	4,290	4,356
On-site	1,039	1,102	487	871	840	420

### 4.2 SOLID WASTE REDUCTION PROGRAMS

#### *General Policy and Goals*

Source reduction involves any activity that prevents waste at its source. Source reduction is identified as the first priority among solid waste management options. It offers the benefits of reducing environmental impacts associated with waste handling, processing and disposal. There is also the potential for the waste generator, whether a business or household to save money by reducing the quantity of waste. The Tri-County will encourage other activities to meet Minnesota Statutes 115A.552. As defined in State Statutes:



*Waste reduction or source reduction means an activity that prevents generation of waste or the inclusion of toxic materials in waste, including: reusing a product in its original form; increasing the life span of a product; reducing the material or the toxicity of material used in production or packaging; or changing procurement, consumption, or waste generation habits to result in*

*smaller quantities or lower toxicity of waste generated.* (Minnesota Statutes §115A.03, subd. 36b)

The Waste Management Act contains specific requirements for source reduction efforts, including requirements for county solid waste management programs.

- ❖ Political subdivisions, educational institutions and other public agencies must aggressively pursue purchasing practices that encourage solid waste and toxicity reduction.
- ❖ Each county’s solid waste management plan must include mechanisms for providing financial incentives to businesses, households and all other solid waste generators to reduce the amount of waste generated.
- ❖ Licensing authorities must require that licensed haulers impose charges for collection of MSW that increase with the volume or weight of waste collected.
- ❖ A local government that collects fees for picking up MSW directly from businesses, households and others that generate the waste must implement charges that increase with the volume or weight of waste collected.
- ❖ Any political subdivision that provides or pays for the costs of collection or disposal of solid waste must make the share of those costs for each business, household or other entity visible and obvious to the generator of that waste.

**Goal**

Based on the above policy and prevailing conditions, the goal for solid waste reduction programs for this Tri-County plan is to:

*Explore avenues to encourage residents and businesses to reduce their solid waste*

**Table 4.2: Cumulative Annual Solid Waste Reduction Targets**

County	Current tons to area landfills	Cumulative Annual Tonnage Target									
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Le Sueur	6,585	6,465	6,392	6,058	5,757	5,686	5,399	5,298	5,093	4,808	4,701
Nicollet	7,413	7,808	7,584	6,977	6,676	6,022	5,787	5,374	5,016	4,668	4,290
Sibley	5,572	5,500	5,367	5,208	5,102	4,983	4,891	4,763	4,645	4,515	4,356

**4.2.1 Existing Solid Waste Reduction Program**

The existing programs for solid waste reduction for the Tri-County are listed below. Section 4.2.2 contains some of these programs which are to be continued and/or modified as well as new programs that are to be added.

#### 4.2.2 Solid Waste Reduction Programs to implement for the next 10 years

- ❖ Targeted outreach to businesses that have strong source reduction potential. Work directly with manufacturers on product stewardship models.
- ❖ Look at opportunities to encourage re-use such as move-out day at Gustavus College.
- ❖ Source reduction promotion and assistance especially to rural areas and farming operations as part of expanded rural waste management programs.
- ❖ Explore opportunities to legislatively work with other Counties, local representatives and environmental groups to implement more product stewardship models and source reduction legislation.
- ❖ Further develop purchasing guidelines that support source reduction and work with local manufacturers to implement source reduction into their products.
- ❖ Consider creating greater source reduction incentives through variable-rate or volume based pricing requirements for solid waste collection.

**Table 4.3: Annual Staff Time (FTE) on Solid Waste Reduction Programs**

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.03	0.0	0.03	.06
Le Sueur	0.03	0.01	0.03	.07
Nicollet	0.03	0.01	0.04	.08
<b>Total</b>	<b>0.09</b>	<b>0.02</b>	<b>0.10</b>	<b>0.21</b>

##### A. Program Budget

This program will be funded through each individual County and Tri-County Waste Education / Source Reduction line items accounts detailed in the Budgets section provided in Appendix 2.

##### B. Implementation Schedule

Implementations of the waste reduction programs are ongoing over the life of this plan.

### 4.3 SOLID WASTE EDUCATION PROGRAMS

#### ***General Policy and Goals***

Minnesota Stat. § 115A.46, subd. 2(f) requires that solid waste plans prepared must indicate programs or measures for educating the public. Describing further the general policy guideline for solid waste education, Minn. Stat. § 115A.072, subd. 2 requires MPCA (as the commissioner for solid waste management) to:

1. develop a statewide waste management public education campaign with materials that may be easily adapted by political subdivisions to meet their program needs; and
2. develop and make available to schools educational curricula on waste education for grades kindergarten to 12 to address at least waste reduction, recycling, litter, and proper management and disposal of problem materials.

These education programs are to help achieve the goals for environmental education programs specified in Minn. Stat. § 115A.73 as follows.

- (a) Pupils and citizens should be able to apply informed decision-making processes to maintain a sustainable lifestyle. In order to do so, citizens should:
  1. understand ecological systems;
  2. understand the cause and effect relationship between human attitudes and behavior and the environment;
  3. be able to evaluate alternative responses to environmental issues before deciding on alternative courses of action; and
  4. understand the effects of multiple uses of the environment.
- (b) Pupils and citizens shall have access to information and experiences needed to make informed decisions about actions to take on environmental issues.

#### **Goals**

Based on the above policy and prevailing conditions, the goals for solid waste education programs for this Tri-County plan are to:

1. *Develop and implement a comprehensive waste management education strategy;*
2. *Educate students of all ages, residents and businesses on how, when, and where solid waste can be recycled; and*
3. *Educate residents and businesses on how, when, and where to properly dispose of hazardous waste.*

#### **4.3.1 Existing Solid Waste Education Program**

The following presents the solid waste education programs which exist in Le Sueur, Nicollet and Sibley Counties. Some or most of these programs will continue, possibly expanded or modified in the coming years as well as new programs may be added as future trends, behaviors and legislation may warrant.

- ❖ Public service announcements on the local cable access channel and in newspapers throughout the year.
- ❖ Local Television and radio appearances.
- ❖ Development and use of traveling displays promoting solid waste activities / programs.
- ❖ Educational materials and displays at local libraries, staffed booths during county fairs, school and or other civic events or civic group meetings.
- ❖ Staff training for businesses on recycling and waste reduction.
- ❖ Advertising to promote successful examples of source reduction by businesses.
- ❖ Development of county specific brochures that outline where individuals and businesses can take waste within each county and how to handle it.
- ❖ Solid waste newsletters to citizens and businesses.
- ❖ Provide annual individual County Solid Waste Education brochures to all residents which explains County specific programs and the wide range of services provided to and available for all County residents and businesses.
- ❖ Promotion of special days for handling hazardous waste.
- ❖ County training program that includes information on waste abatement.
- ❖ Tours of WTE, RDF& recycling facilities.
- ❖ Organizing and promoting events in recycling week, pollution prevention week, and Earth Day activities.
- ❖ Visiting businesses in the counties in person with recycling and waste reduction information and options.
- ❖ Continue to educate & encourage the development and participation of City run yard waste compost sites and to fully educate the public on the whole cycle of yard waste starting with reduction and the on-going options for yard waste disposal and composting.

### 4.3.2 Solid Waste Education Programs to implement for the next 10 years

The public education program will be coordinated at the Tri-County level, primarily by the Tri-County Solid Waste Director. Tri-County will also utilize part-time staff that will assist in educational efforts. The Tri-County Director and individual solid waste officers will direct the program and participate in public education activities as time and events permits. In addition, the Tri-County staff will work with its Board and citizens to review and recommend changes to its education programs. The following table is estimated staff time needed for these programs. The Tri-County will continue to implement the existing waste education programs.

Table 4.4: Annual Staff Time (FTE) on Solid Waste Education Programs

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.06	0.04	0.03	.13
Le Sueur	0.07	0.04	0.03	.14
Nicollet	0.12	0.04	0.09	.25
<b>Total</b>	<b>0.25</b>	<b>0.12</b>	<b>0.15</b>	<b>0.52</b>

#### A. Program Budget

This program will be funded through each individual County and Tri-County Waste Education / Source Reduction line items accounts detailed in the Budgets section provided in Appendix 2.

#### B. Implementation Schedule

Implementation of the Solid Waste Education Programs are ongoing over the life of this plan.

## 4.4 RECYCLING PROGRAMS

### *General Policy and Goals*

Recycling reduces the volume of the waste stream, conserves resources and creates useful products. A successful recycling program hinges on ensuring that households and businesses have convenient options for participating in recycling efforts. Minn. Stat. § 115A.03 subd. 25b considers recycling means as; "...the process of collecting and preparing recyclable materials and reusing the materials in their original form or using them in manufacturing processes that do not cause the destruction of recyclable materials in a manner that precludes further use".

In specifying recycling targets, Minn. Stat. § 115A.551 subd. 2a stipulates that by December 31, 1996, a county outside the metropolitan area should have its goal of recycling 35 percent by weight of total solid waste generation and a metropolitan county should have 50 percent by weight of total solid waste generation. This provision does not however prohibit a county from recycling more than the stipulated target goals.

### Goal

Subsequent to the above policy and prevailing conditions, the goal for solid waste recycling programs for this Tri-County plan is broadly defined as:

*Significantly increase the recycling rate for all three counties within the next ten years. Conduct more recycling programs/ events with & for our schools, 4H Groups, Boy Scouts, Girl Scouts and Church Groups.*

#### 4.4.1 Existing Public and Private Sector Recycling Programs

The three counties promote public and private recycling opportunities. The city of Le Center owns their recycling facility and contracts with Waste Management to operate the facility. Currently, Tri-County on behalf of Le Sueur and Sibley Counties has a recycling contract with Waste Management Inc.. The Tri-County have had past agreements / contracts with Waste Management going back to September of 1990. The current contract (included in Appendix 6) with Waste Management Inc. is set to expire at the end of 2013 and the Tri-County is considering its options going forward as of this writing.

The current contract enables other licensed haulers within both Counties to bring recyclables to the Waste Management transfer station located just six miles south of the City of Le Sueur. Rural residents and business can “self-haul” their recyclables to the Waste Management facility as well. All municipalities within Le Sueur and Sibley Counties have recycling services provided by a licensed hauler to their residents and a large percentage of the recyclables are brought to the Waste Management facility described in Chapter 3 under 3.4.1 section E.

All licensed haulers report the recycling tonnages to the Tri-County as required by law each year for annual reporting regardless of where they deliver recyclables. Licensed haulers are required to provide recycling services to residents as part of the licensing process. Currently, there are 9 licensed haulers in Sibley County, 5 in Nicollet County and 7 in Le Sueur County. Also, all municipalities in Sibley County offer a recycling site to City and rural residents, some sites are 24/7 and other sites are operated once per week. Le Sueur County residents can bring additional recyclables to the City of Le Center recycling center or to the Waste Management transfer station located south of Le Sueur. Waste Management does all the processing and marketing of materials once they are received at the recycling facility located four (4) miles south of Le Sueur. Waste Management has a revenue sharing agreement with Sibley & Le Sueur Counties on the sale of recyclable materials. Waste Management accepts the following materials:

- ❖ Newspaper;
- ❖ Corrugated cardboard;
- ❖ Office and computer paper;
- ❖ Aluminum and bi-metal food and beverage cans;
- ❖ Steel/tin food and beverage cans;
- ❖ Plastic, numbers 1 through 7 (with a neck);
- ❖ Glass food and beverage containers (clear, green, blue, and amber);
- ❖ Mixed paper;
- ❖ Magazines and catalogues;
- ❖ Textiles and old clothing;
- ❖ Electronics; and
- ❖ Appliances.

Nicollet County has a contract with Hansen Sanitation to collect recyclables from the Nicollet County Rural Recycling drop boxes located in Lafayette, Nicollet, Norseland and St. Peter in Nicollet County. These drop boxes are available 24/7 year around and are exchanged at various times throughout the week. This material is taken to the Riverbend Recycling Center (publicly owned) located at 600 Webster Avenue in North Mankato and this facility also provides a drop-off point for individuals and small businesses. It is open 7 days a week and accepts: cardboard, newspaper, office paper, magazines, glass, plastic, cans and textiles. This facility contains a sort-line for recycling and allows for additional sorting after source separated recycling has occurred in order to provide the best possible product to send to the markets.

Nicollet County also has an agreement with the City of North Mankato which provides the processing and marketing of recyclables. The City of North Mankato has an agreement with LJP Enterprises to process and market its recyclables. The following materials are accepted at the Riverbend Recycling Center for Nicollet County residents:

- ❖ Newspaper;
- ❖ Corrugated cardboard;
- ❖ Office and computer paper;
- ❖ Aluminum and bi-metal food and beverage cans;
- ❖ Steel/tin food and beverage cans;
- ❖ Plastic, numbers 1 through 7 (with a neck);
- ❖ Glass food and beverage containers (clear, green, blue, and amber);
- ❖ Mixed paper;
- ❖ Magazines and catalogues;
- ❖ Textiles and old clothing; and
- ❖ Electronics.

Incorporated Cities in Nicollet County have organized collection with licensed haulers in Nicollet County. Granby and Nicollet townships also have a contract for solid waste and recycling services. These services are provided once per week to all township residences.

Licensed haulers for Nicollet County also report recycling tonnages annually to the Tri-County.

Commercial businesses in Nicollet County usually contract for recycling services with a licensed hauler in Nicollet County. In 2012, LJP Enterprises moved and expanded its recycling and overall operations to 2160 Ringhofer Drive in North Mankato. The new LJP facility specializes in commercial and industrial recycling and processing. LJP Enterprises caters to large businesses such as the Taylor Corporation, 3M out of New Ulm, MN and other large entities that have special waste streams that can be recycled. Table 2.28 provides a summary of residential and commercial recycling for Nicollet County based on 2011 SCORE reports.

Curbside recycling is provided to all communities with populations over 5,000. Currently, there are no communities within the area that have a population greater than 20,000. The Tri-County Solid Waste Office works closely with individual county offices, schools and various businesses to encourage and expand existing recycling programs.

**Table 4.5: Annual Tons of Solid Waste Recycled by Generators**

County	Solid Waste Generator	Annual Waste Generated (Tons)				
		2008	2009	2010	2011	2012
Le Sueur	Residents	1,281.77	1,371.11	1,357.30	1,379.04	1,407.51
	Businesses	10,125.23	11,537.89	8,118.70	8,298.96	9,584.24
Nicollet	Residents	1,881.49	2,865.41	2,440.49	2,598.82	2,659.14
	Businesses	13,465.51	11,455.59	12,762.51	14,633.18	16,240.61
Sibley	Residents	1,034.98	974.67	875.95	1,077.57	860.20
	Businesses	5,290.02	5,543.33	6,035.05	5,025.43	4,924.33
<b>Total</b>		<b>33,079</b>	<b>33,748</b>	<b>31,590</b>	<b>33,013</b>	<b>35,676</b>

#### 4.4.2 Recycling Programs to Implement for the next 10 years

- ❖ Ensure recycling education programs are sending a consistent message to residents and businesses about the importance of recycling.
- ❖ Work with schools to ensure that students have access to recycling programs to meet MN Statute 115A. 151.
- ❖ Continue efforts in using glass in road-based materials.
- ❖ Establish and promote recycling drop-off locations and curbside pickup options within the Cities and rural areas of the County to improve rural recycling.
- ❖ Identify new and underutilized recycling opportunities for businesses and help waste haulers and recyclers meet those needs.
- ❖ Work closely with recycling collectors to improve the quality of data, especially data on business recycling efforts.

- ❖ Tri Counties (Sibley & Le Sueur Counties) will be renegotiating a recycling contract with Waste Management or another entity for continued recycling service for both Counties.
- ❖ Public Entities and municipalities have and participate in existing recycling programs and curbside recycling programs that have collection of recyclables at least once per month of all statutorily required recyclable materials.
- ❖ All three County ordinance require the collection of the statutorily required recyclable materials (a minimum of 4 plus materials)
- ❖ All Government facilities have recycling programs & contracts to recycle a minimum of three plus materials.
- ❖ Tri County actively educates and promotes recycling programs for commercial, industrial and institutional facilities through on site visits with our waste audits and evaluation program and general education programs
- ❖ Currently, private businesses are encouraged to contract with a County licensed solid waste hauler for recycling services.
- ❖ Some businesses such as the Taylor Corporation in Nicollet County contract with LJP Enterprises for special industry specific recycling, in this case it would be specialized paper recycling.
- ❖ Currently, local recycling market conditions fluctuate with the economy or the price of oil in general as well as supply and demand for specific market materials.

The recycling program has been developed jointly between the Tri-County Board members, Tri-County staff, each County solid waste staff, local units of government and haulers. Ongoing operation of the program is coordinated by individual municipalities along with ongoing supervisory, public education, and promotional support from Tri-County and County staff. The required staff time for each of the individual counties is itemized in Table 4.6

Table 4.6: Annual Staff Time (FTE) on Recycling Programs

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.08	0.02	0.04	.14
Le Sueur	0.09	0.03	0.04	.16
Nicollet	0.10	0.03	0.07	.20
<b>Total</b>	<b>0.27</b>	<b>0.08</b>	<b>0.15</b>	<b>0.50</b>

#### A. Program Budget

This program will be funded through each individual County and Tri-County Recycling Operations line item accounts detailed in the Budgets section provided in Appendix X.X.

## B. Implementation Schedule

Implementation of the Solid Waste Recycling Programs are ongoing over the life of this plan.

### 4.5 YARD WASTE MANAGEMENT PROGRAMS

#### *General Policy and Goals*

Yard waste increases the solid waste flow, especially in the spring and fall months. Minnesota Statute § 115A.03 subd. 38 specifies “yard wastes” as being; “garden wastes, leaves, lawn cuttings, weeds, shrub and tree waste, and prunings”. The Minnesota legislation adopted in 1991 banned the disposal of yard waste in landfills after January 1, 1992. Specifically, MN Minn. Stat. § 115A.931 (a) prohibits the placing of yard waste in:

- ❖ Mixed municipal solid waste;
- ❖ Disposal facility; and
- ❖ Resource recovery facility except for the purposes of reuse, composting, or co-composting.

#### **Goals**

Based on the above policy and prevailing conditions, the goals for yard solid waste programs for this Tri-County plan are to:

1. *Comply with state restrictions on the landfill of yard waste.; and*
2. *Educate the public on options for managing yard waste.*

#### **4.5.1 Existing Public and Private Sector Yard Solid Waste Programs**

Neither the Tri-County Joint Powers Board nor the Counties have established any yard waste facilities. Table 4.7 presents 2011 yard waste generated for the 3 counties. Municipalities generally do not measure or scale amount of yard waste received. Thus, this Plan cannot identify the amount of yard waste for the last five years. Municipalities do not offer curbside collection of yard waste. Typically the cities yard waste compost sites are a free service provided to area residents. Each individual county as well as Tri-County supports the cities with planning and technical assistance for the establishment of community-owned yard waste compost sites.

Table 4.7: 2011 Yard Waste Materials in Cubic Yards

County	Annual Cubic Yards of Yard Waste Materials
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Sibley County	4,000
Le Sueur County	6,300
Nicollet County	10,000
<b>Total Cubic Yards</b>	<b>20,300</b>

*Source: GVTs ( Base year data). These are the amounts of yard waste materials collected in the year of 2011. No previous amounts of yard waste materials have been recorded or are available.*

The Tri-Counties will continue to encourage backyard composting through public education. Additionally, Tri-County will provide the necessary public education program to carry out an information program. These programs will be consistent with the January, 1992 state ban on the landfilling of yard waste. The Cities of New Prague, Le Center, St. Peter and North Mankato offer at the minimum of once per year of curbside collection of yard waste. These Cities either use City trucks or privately contract out collection to then deliver materials collected to the local city compost / yard waste site. The City of Waterville has curbside collection of brush (tree trimmings) only for residents. This is a specific call in request of the residents for this curbside service. The Counties do not have specific requirements of solid waste haulers to haul yard waste materials.

Currently, no private sector yard waste programs currently exist in the Tri-County area. Several communities in each of the Tri-Counties have established community-owned compost sites (see Table xx below). These materials are accepted for a nominal amount at their recycling facility. The SMC Compost Facility located at 57032 231<sup>st</sup> Lane (one mile north of Hwy 14 off of 3<sup>rd</sup> Avenue) in Mankato also accepts yard waste and brush from out of county residents for a nominal fee.

Just recently in the spring of 2013 Full Circle Organics opened its doors to the surrounding area to receive yard waste for a fee. Full Circle Organics is located at 16225 563 Avenue, in Good Thunder, MN. They take yard waste materials from businesses as well as residences such as floral trimmings, plants, grass clippings, leaves, weeds, brush, logs and stumps, wood and debris cleared from residential or commercial properties, agricultural land and rural forestry residuals. Rural residents who do not have access to a city yard waste site are directed to one of the two above facilities or are sent materials on home yard waste composting.

SMC and Full Circle Organics process yard waste and sell or market the finished materials such as mulch or compost to individual residents or commercial businesses such as area landscaping companies. The local market conditions for finished yard waste compost material is reasonable good especially with gardeners and landscapers in the area Cities.

The following Cities in the Chart below – Table 4.8 lists the Cities who have drop off sites for local area residents. The charts also list which Cities offer curbside collection services.

**Table 4.8: Yard Waste/Compost Sites available in the Tri-County**

County	Owner/Operator	Compost Site	Curbside Collection
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County	Owner/Operator	Compost Site	Curbside Collection
Le Sueur County	SMC Compost Facility (Mankato)	Yes	No
	Full Circle Organics, Good Thunder	Yes	No
	Le Center	Yes	Yes
	Le Sueur (City of)	Yes	No
	Cleveland	Yes	No
	Montgomery	Yes	No
	Elysian	Yes	No
	New Prague	Yes	Yes
	Waterville	No	Yes (Brush only)
Nicollet County	North Mankato	Yes	Yes
	St. Peter	Yes	Yes
	Nicollet (City of)	Yes	No
	Courtland	Yes	No
	Lafayette	Yes	No
Sibley County	Arlington	Yes	No
	Gibbon	Yes	No
	Henderson	Yes	No
	Green Isle	Yes	No
	Gaylord	Yes	No
	Winthrop	Yes	No
	New Auburn	Yes	No

#### 4.5.2 YardWaste Management Programs to implement for the next 10 years

- ❖ Encourage the development and participation of City run yard waste compost sites.
- ❖ Continue to promote reduction options through mulching and backyard composting as well as the drop-off/curbside collection options.
- ❖ Organize annual Christmas trees collection with the help of cities, community volunteers, civic organizations and Sentence-to-Service crews.
- ❖ Collaborate with the Master Gardeners of all counties in disseminating information on yard waste composting.

Table 4.9: Staff Hours Required (FTE) in Implementing the Yard Solid Waste Programs

Jurisdiction	Tri-County Director	County Extension	City Staff	County Solid Waste Officer	Total
Sibley	0.01	0.05	0.20	0.01	0.27
Le Sueur	0.01	0.05	0.20	0.01	0.27
Nicollet	0.01	0.05	0.20	0.01	0.27
<b>Total</b>	<b>0.03</b>	<b>0.15</b>	<b>0.60</b>	<b>0.03</b>	<b>0.81</b>

#### A. Estimated Program Budget

The annual expense for the yard waste programs is included in the yard waste line items in the separate County budgets. There is no line item expense for yard waste in the Tri-County Solid Waste Budget. There is some expense related to yard waste in the Tri-County Budget under the waste education line item. County education efforts are included in the

individual county solid waste budgets. Municipal operation and maintenance costs are generally included in their public wastes budgets (see Appendix 2 for the budget).

### **B. Implementation Schedule**

Implementation of the yard waste management program is ongoing.

## **4.6 SOURCE-SEPARATED ORGANIC MATERIALS (SSOM) COMPOSTING PROGRAMS**

### ***General Policy and Goal***

Minnesota Statute § 115A.03 subd. 32(a) defines “Source-separated compostable materials” as; “materials that:

1. Are separated at the source by waste generators for the purpose of preparing them for use as compost;
2. Are collected separately from mixed municipal solid waste, and are governed by the licensing provisions of section (Minn. Stat. 115A.93;
3. Are comprised of food wastes, fish and animal waste, plant materials, diapers, sanitary products, and paper that is not recyclable because the commissioner has determined that no other person is willing to accept the paper for recycling;
4. Are delivered to a facility to undergo controlled microbial degradation to yield a humus-like product meeting the agency's class I or class II, or equivalent, compost standards and where process residues do not exceed 15 percent by weight of the total material delivered to the facility; and
5. May be delivered to a transfer station, mixed municipal solid waste processing facility, or recycling facility only for the purposes of composting or transfer to a composting facility, unless the commissioner determines that no other person is willing to accept the materials.

### **Goal**

Subsequent to the above policy and prevailing conditions, the goal for source-separated organic waste materials programs for this Tri-County plan is broadly defined as:

*Provide improved options for the collection and disposal of source separated organic materials.*

#### **4.6.1 Existing Collection System for Source-Separated Organic Materials**

Currently, composting SSOM does not represent a major component of the Tri-County integrated solid waste management system and there are very few private businesses providing this service. The largest organic materials composter in the area is Full Circle Organics, located in Good Thunder Township, Blue Earth County. This facility currently composts organic material from businesses and institutions from the Mankato/North Mankato and surrounding areas. It should also be noted that Gustavus Adolphus College has just installed a composter for its cafeteria food waste materials in the summer of 2013. It is expected to handle the SSOM materials from the college throughout the school year including sports activities and special events such as the Nobel Conference.

##### **A. Collection Amounts and Types**

Full Circle Organics is permitted to collect 110 tons of SSOM per day (25,000 tons yearly), an unlimited quantity of yard debris for blending purposes, and up to 40,000 gallons of pure liquids per visit. Sources of SSOM include food waste (both liquid and solid), paper waste, garden waste, and animal bedding.

##### **B. Organic Material Generators**

Generators producing SSOM for the Full Circle Organics facility are area coffee shops, garden centers, restaurants, grocery stores, food manufacturers, and city yard debris collection sites. These materials are hauled commercially by licensed county haulers.

##### **C. Composting Facility**

The facility is situated on 10.0 acres approximately 12.0 miles southwest of Mankato, in Blue Earth County. Access to the facility is on existing state and county roads.

Compost material is received in the mixing building and the liquids are stored in a 20,000-gallon underground storage tank. Liquid from the tank is used in the mixing process and the active composting process. Excess liquid from the mixing process is collected in the underground storage tank and reused in the mixing process.

After the compost material is received in the mixing building, it is combined with yard waste and other organic material until the appropriate blend is reached. The blended material is moved only after it has reached 131<sup>0</sup>F, after which it is relocated to the composting pad and placed in windrows. Windrow composting consists of placing the mixture of raw materials in long narrow piles that are turned on a regular basis. The turning mixes the composting materials and enhances passive aeration.

It remains in windrows until it has completed the active compost process that further reduces pathogens, and reaches maturity. At maturity, the compost is screened and then stored on the final product storage pad. The finished compost is sold in bulk to residents, commercial landscapers and other businesses for land application, counties and cities for

their facilities and erosion control, rain garden construction, and other purposes, and used by agricultural industry for a soil amendment and animal bedding.

#### 4.6.2 Source-Separated Organic Materials Programs to implement for the next 10 years

Tri-County will study the feasibility and reasonableness of instituting programs of source-separated organics materials (SSOM) composting in the commercial and institutional sectors in conjunction with existing private sector operators and developers of composting facilities in the area.

##### **Specific Programs:**

- ❖ Work with licensed haulers to encourage collection of source separated organics through current waste collection programs especially for qualifying business entities.
- ❖ Promote a list of licensed organic material haulers available to businesses, institutions and consumers.
- ❖ Work with State, institutional, and educational facilities and other entities to promote programs for SSOM composting, and
- ❖ Provide education materials to encourage and promote backyard organics composting by residents and provide informational materials for business waste audits in order to identify good candidates to participate in source separated organics collection.

Table 4.10: Staff Hours Required (FTE)in Implementing the Source-Separated Organic Materials Programs

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.01	0.0	0.01	.02
Le Sueur	0.01	0.0	0.01	.02
Nicollet	0.01	0.0	0.02	.03
<b>Total</b>	<b>0.03</b>	<b>0.0</b>	<b>0.04</b>	<b>0.07</b>

#### A. Program Budget

This program will be funded through each individual County and Tri-County Waste Education / Source Reduction line item accounts detailed in the Budgets section provided in Appendix 2.

#### B. Implementation Schedule

Implementation of the SSOM Programs are ongoing over the life of this plan and are expected to increase over time as Tri-County can approaches a successful scale of economies for SSOM.

## 4.7 SOLID WASTE RESOURCE RECOVERY

### *General Policy and Goals*

Minnesota Statute § 115A.03 subd. 27 defines “Resource Recovery” as; “the reclamation for sale, use, or reuse of materials, substances, energy, or other products contained within or derived from waste”. Hence, “a waste facility established and used primarily for resource recovery, including related and appurtenant facilities such as transmission facilities and transfer stations primarily serving the resource recovery facility” is referred to as a “Resource Recovery Facility” (MN Stat. § 115A.03 subd. 28)

#### **Goals**

Subsequent to the above policy and prevailing conditions, the goals for resource recovery for this Tri-County plan are broadly defined as:

1. *Recover/discover more resources from the solid waste stream in all three counties; and*
2. *Meet current capacity needs at the Resource Recovery & Waste to Energy Facilities.*

### **4.7.1 Existing RDF Programs**

Neither the Tri-County Joint Powers Board nor any of the member counties have plans to own or establish a waste-to-energy facility because there is sufficient capacity of the existing integrated system in the immediate area for the foreseeable future. With the adoption of the solid waste hierarchy, the counties have placed a priority on processing the raw waste stream to recover the resources available and to reduce the volume of waste that must be landfilled. To this end, the Tri-County’s Solid Waste Plan is to optimize the use of existing facilities. Additional information on the integrated waste to energy process and the facilities (MWPC, RRT & Wilmarth) used by the Tri-County area are included in Chapter 3 section 3.3 of this plan. Tables 4.11 and 4.12 respectively present the annual and projected (based on the GVTs) tonnage of RDF generated. Table xx presents the annual tonnage processed by the Wilmarth WTE Facility.

**Table 4.11: Annual Solid Waste Tons Dedicated to RDF Processing**

County	Annual Solid Waste Tons Dedicated to RDF Processing (Tons)				
	2008	2009	2010	2011	2012
Le Sueur	5,550	6,674	7,056	6,955	5,922
Nicollet	8,734	9,454	8,665	9,621	9,489
Sibley	693	757	858	774	732
<b>Total</b>	<b>14,977</b>	<b>16,885</b>	<b>16,579</b>	<b>17,350</b>	<b>16,143</b>

Note: Not all solid waste materials dedicated to RDF processing is turned into RDF as there is a small percentage reject of materials sent to the Ponderosa landfill

Table 4.12: Projected Annual RDF from the Tri-County

County	Proposed Annual Tons for RDF Processing									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sibley County	810	880	930	975	1,015	1,043	1,071	1,094	1,122	1,145
Le Sueur County	7,025	7,025	7,275	7,535	7,535	7,738	7,741	7,844	8,047	8,050
Nicollet County	9,760	9,915	10,075	10,190	10,325	10,485	10,645	10,805	10,965	11,125
<b>Total</b>	<b>17,595</b>	<b>17,820</b>	<b>18,280</b>	<b>18,700</b>	<b>18,875</b>	<b>19,266</b>	<b>19,457</b>	<b>19,743</b>	<b>20,134</b>	<b>20,320</b>

Table 4.13: Annual RDF Processed / Used by the Wilmarth WTE Facility

Facility	Location	Annual RDF (Tons)				
		2008	2009	2010	2011	2012
Wilmarth WTE Facility	Mankato	168,863	175,061	159,262	176,361	169,492

#### 4.7.2 MSW Solid Waste Incineration and Resource Recovery Programs to Implement over the next 10 years.

Presented in this section are the existing resource recovery programs in the Tri-County. Section 4.7.2 contains some of these programs which are to be continued and/or modified as well as new programs that are to be implemented for the next ten years.

##### Programs:

- ❖ Develop long-term waste agreements with current and future energy recovery facilities.
- ❖ Explore and develop potential partnerships between the integrated waste management system and other energy recovery facilities.
- ❖ Provide public education regarding the life cycle of garbage.
- ❖ Develop partnerships with neighboring counties to ensure a steady supply of RDF is available for our integrated system.
- ❖ Maintain current RDF processing levels and consider options for future increases by continuing to dedicate Tri-County staff time in maintaining the WTE system and educating the Public Entity solid waste statute.

Table 4.14: Staff Hours Required (FTE) in Implementing the Resource Recovery Programs

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.02	0.01	0.01	.04
Le Sueur	0.02	0.01	0.01	.04
Nicollet	0.02	0.01	0.02	.05
<b>Total</b>	<b>0.06</b>	<b>0.03</b>	<b>0.04</b>	<b>0.13</b>

#### A. Program Budget

This program will be funded through each individual County and Tri-County Source

Reduction fund and Administrative Services line items detailed in the Budgets section provided in Appendix 2.

## **B. Implementation Schedule**

Implementation of the Resource Recovery Programs are ongoing over the life of this plan.

### **4.8 MSW LAND DISPOSAL FACILITIES**

#### ***General Policy and Goals***

The use of land disposal facilities is discouraged as a general policy in the planning and management of solid waste in Minnesota. Minnesota Stat. § 115A.46 subd. 2. (d) states that; “The plans shall address at least waste reduction, separation, recycling, and other resource recovery options, and shall include specific and quantifiable objectives, immediately and over specified time periods, for reducing the land disposal of mixed municipal solid waste and for the implementation of feasible and prudent reduction, separation, recycling, and other resource recovery options”.

#### **Goals**

Subsequent to the above policy and prevailing conditions, the goals for MSW land disposal for this Tri-County plan are to:

- 1. Support MPCA initiatives to document landfill air emissions and the long-term impacts and costs of landfilling to support future policy decisions; and*
- 2. Explore alternative means of reducing and disposing of waste not suited for RDF in order to discourage land disposal.*

#### **4.8.1 Description of Existing Facilities**

The Tri-County actively encourages businesses and residents to reduce, reuse and recycle materials to conserve resources, and to divert waste from land disposal to recover resources and protect the environment. None of our three Counties owns or operates a landfill nor has plans to open a landfill at any point in the future. There are two closed landfills in Le Sueur County and one closed landfill in Sibley County, all of which have been entered into the MPCA closed landfill program. The MPCA controls the perpetual monitoring of any mitigation requirements of these closed sites. Contracted solid waste haulers are responsible for delivering any waste or process residuals to a permitted land disposal facilities.

MSW generated in Le Sueur, Sibley or Nicollet Counties is disposed of at the following facilities: MWPC Transfer Station, the Ponderosa Landfill in Blue Earth County, the Spruce

Ridge Landfill in McLeod County, the Brown County Landfill or the Waste Management Transfer Station in Le Sueur County. A more detailed description of these facilities is in Chapter 3 of this solid waste plan. Residuals from the integrated WTE system are disposed of at the Ponderosa Landfill.

#### 4.8.2 MSW Land Disposal Programs to Implement for the next 10 years

- ❖ Organize and intensify publicity (at least once a year) on the reduction of waste types not suitable for RDF.
- ❖ Conduct research on environmentally-friendly alternative disposal means for wastes not suitable for RDF.
- ❖ Have list of neighboring landfills available for waste not suitable for RDF.
- ❖ Engage the waste industry to improve waste diversion opportunities at waste facilities.
- ❖ Provide residents and businesses with educational materials on how to reduce sources of waste not suited for RDF.
- ❖ Support the MPCA to organize periodic assessments of the cost and benefits of diverting / delivering waste by the use of transfer stations.

Table 4.15: Staff Hours Required (FTE) in Implementing the MSW Land Disposal Programs

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.01	0.01	0.01	.03
Le Sueur	0.01	0.01	0.01	.03
Nicollet	0.01	0.01	0.01	.03
<b>Total</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.09</b>

#### A. Program Budget

This program is funded through Administrative Services and salaries line items detailed in the Budgets section provided in Appendix X.X.

#### B. Implementation Schedule

The Land Disposal Programs are ongoing over the life of this plan.

### 4.9 WASTE TIRE MANAGEMENT PROGRAMS

#### *General Policy and Goals*

Waste tires means “a tire that is no longer suitable for its original intended purpose because of wear, damage, or defect” (Minn. Stat. § 115A. 90 Subd. 11). Old tires that are collected for proper management have a number of end uses, including tire-derived fuel (TDF), shredding for road construction, and other miscellaneous uses. Disposal of waste tires in the land is prohibited under the Statutes (Minn. Stat. § 115A. 904).

This section presents the existing waste tire management programs in Sibley, Le Sueur & Nicollet Counties. Section 4.9.2 contains some of these programs, which are to be continued and/or modified as well as new programs that are to be implemented for the next ten years. The Solid Waste Ordinances for all Counties include language that meets the MPCA requirements related to tire storage and disposal. Table 4.16 presents the annual tons of waste tire generated in all three counties, while the list of waste tire haulers and their destination sites have been identified as well.

Table 4.16: Number of Tires Generated

County	Number of Tires Generated / Collected / Recycled in Tons				
	2008	2009	2010	2011	2012
Le Sueur	113	135	125	209	156
Nicollet	73	76	77	82	91
Sibley	82	92	152	145	140
<b>Total</b>	<b>268</b>	<b>303</b>	<b>354</b>	<b>436</b>	<b>387</b>

#### 4.9.1 Existing Public/Private Sector Waste Tire Management

The Waste Management Transfer Station accepts tires for recycling at a nominal cost. Tires are also managed by businesses that sell and install tires in the counties. Once a year each Sibley, Le Sueur and Nicollet Counties host County wide tire collection events. At these special one day events, each county subsidizes the disposal cost. Residents have to pay a minimal charge, such as \$1.00 per car tire, \$5.00 per semi tire and \$10.00 per tractor tire to dispose of the waste tires. The events have been extremely successful.

Each of the three counties believes that by subsidizing these one day collections they are helping to keep waste tires out of county ditches and from being stockpiled. All three counties have adopted amendments to their ordinances banning the land disposal of waste tires. Each County's solid waste or environmental services departments investigate the existence of illegal tire dumps in their jurisdiction. At this time no illegal tire dumps have been identified in Le Sueur, Nicollet or Sibley Counties.

The individual county solid waste departments are responsible for enforcement of all solid waste infractions. Majority of staff time required is associated with the education program. The current end use of waste tires collected by the Counties include, crumb rubber, rubber mulch and roadway bedding. The transportation of waste tires must be conducted by MPCA-permitted waste tire transporters. The Tri-County have used the following permitted transporters for removing tires collected during County-wide collection events:

1. Liberty Tire, WT0022  
12498 Wyoming Avenue South  
Savage, MN 55378
2. First State Tire Disposal Inc., WT0014  
500-278th Lane North East  
Isanti, MN 55040

### Goals

Subsequent to the above policy and prevailing conditions, the goals for solid waste tire management programs for this Tri-County plan are to:

1. *Reuse or recycle waste tire material into other useful products; and*
2. *Enhance tire disposal education efforts.*

#### 4.9.2 Waste Tire Management Programs to implement over the next 10 years

1. Continue to identify and clean-up “clandestine” tire sites in rural areas if in existence.
2. Organize County wide tire collections for each County at least once a year.
3. Work with interested private industries to research the feasibility of a facility for recycling or generating energy or fuels from waste tire materials.
4. Work with cities in the Tri-County to include tires in their public clean-up days; and
5. Continue to make tire sales and service retail businesses major drop-off sites for waste tires.

Table 4.17: Staff Hours Required (FTE) in Implementing the Waste Tire Programs

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.02	0.01	0.02	.05
Le Sueur	0.03	0.01	0.02	.06
Nicollet	0.02	0.01	0.02	.05
<b>Total</b>	<b>0.07</b>	<b>0.03</b>	<b>0.06</b>	<b>0.16</b>

#### A. Program Budget

Tri-County pays for the advertising of the individual County tire collection events and Tri-County pays for the part-time staff to work at these events. It should also be noted that each County STS crews are scheduled to work at these collection events as well to minimize staffing costs. Each County pays for their own disposal at Liberty Tire. As mentioned above, residents do pay a subsidized fee to dispose of their tires at the collection events. The collection fees help pay for tire disposal and salaries for the collection events. The costs for these collection events are listed in the Budgets section provided in Appendix 2.

#### B. Implementation Schedule

The Waste Tire Management Programs are ongoing over the life of this plan.

## 4.10 ELECTRONIC PRODUCTS PROGRAMS

### ***General Policy and Goals***

Waste electronics represent a growing segment of the waste stream. Some electronic products are of particular concern for Sibley, Le Sueur & Nicollet Counties, especially televisions and computer monitors which have cathode ray tubes. These tubes contain significant amounts of lead and other toxic metals. Minn. Stat., § 115A.9565 prohibits placing in mixed municipal solid waste an electronic product containing a cathode-ray tube. The Tri-County therefore provides simple, convenient and affordable collection opportunities for residents.

### **Goals**

Subsequent to the above policy and prevailing conditions, the goals for electronic products programs for this Tri-County plan are broadly defined as:

- 1. Assure a clean and healthy environment by preventing the illegal disposal of electronics in lakes, woods, ditches, and other rural areas; and*
- 2. Comply with state laws on electronic products recycling and disposal.*

### **4.10.1 Existing Programs**

The existing electronic products programs in Sibley, Le Sueur & Nicollet Counties have been presented in this section. Section 4.10.2 contains some of these programs which are to be continued and/or modified as well as new programs that are to be implemented for the next ten years.

Some components in electronic products contain hazardous materials such as lead, mercury, cadmium and arsenic. There are a large numbers of electronic components in use today in homes as well as in the workplace. These products can cause environmental problems if disposed of in the regular municipal solid waste stream. Minnesota law requires business and institutions in the state to manage electronic devices and components in conformance with state and federal laws.

The Tri-County Solid Waste Office will assist businesses by providing them with informational fact sheets and the names of companies that can recycle their old electronic components. The Tri-County Solid Waste Office will assist residents to dispose of their home electronic components by having a local program that is easy and convenient to use. Currently the Tri-County residents and businesses have the following options to dispose of their electronic items in the area.

1. Green Tech Recycling, 205 West Spring Street, Mankato, MN
2. Best Buy, 1895 Adams Street, Mankato, MN

3. Riverbend Recycling Center, 600 Webster Avenue, North Mankato, MN
4. Waste Management Transfer Station, 4 miles South of Le Sueur, MN

In 2003 the Tri-County added collecting electronics along with the tires and appliances from residents for a subsidized fee at the annual County wide collection events. These special one day collection events have been very successful & popular among County residents. Fees for electronics have been adjusted to lower the County subsidy of these collection events. Below is a table listing the annual amounts in tons of electronics that have been collected at these events in addition to what has been reported by businesses during our annual SCORE reporting.

**Table 4.18: Annual Quantity of Electronic Products Recovered**

County	Electronic Materials Recycled / Recovered in Tons				
	2008	2009	2010	2011	2012
Le Sueur	25	26	26	25	134
Nicollet	56	105	27	164	72
Sibley	25	14	18	22	17
<b>Total</b>	<b>106</b>	<b>145</b>	<b>71</b>	<b>211</b>	<b>223</b>

#### 4.10.2 Electronic Products Programs to Implement for the next 10 years Programs:

- ❖ Inform the public (through brochures and other print and electronic means) on the need to properly recycle electronic products..
- ❖ Have list of licensed recycling options available to the public.
- ❖ Have day collections for electronics throughout Sibley, Le Sueur & Nicollet Counties as needed.
- ❖ Develop and periodically review enforcement tools on the disposal of electronic products in all counties.

**Table 4.19: Staff Hours Required (FTE) in Implementing the Programs for Electronic Products**

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.02	0.01	0.02	.05
Le Sueur	0.03	0.01	0.02	.06
Nicollet	0.02	0.01	0.02	.05
<b>Total</b>	<b>0.07</b>	<b>0.03</b>	<b>0.06</b>	<b>0.16</b>

#### A. Program Budget

Tri-County pays for the advertising of the individual County electronic collection events and Tri-County pays for the part-time staff to work at these events. It should also be noted that each County STS crews are scheduled to work at these collection events as well to minimize staffing costs. Each County pays for their own disposal at Green Tech Recycling. As mentioned above, residents do pay a subsidized fee to dispose of their electronics at the collection events. The collection fees help pay for electronic disposal and salaries for

the collection events. The costs for these collection events are listed in the Budgets section provided in Appendix X.X.

## **B. Implementation Schedule**

The Electronic Waste Management Programs are ongoing over the life of this plan.

### **4.11 MAJOR APPLIANCE MANAGEMENT**

#### ***General Policy and Goals***

The policy here is to ensure that appliance disposal options exist for major appliances, consistent with State law (Minn. Stat., § 115A.552). The statutes define this waste type as; “Major appliances” means clothes washers and dryers, dishwashers, hot water heaters, heat pumps, furnaces, garbage disposals, trash compactors, conventional and microwave ovens, ranges and stoves, air conditioners, dehumidifiers, refrigerators, and freezers” (Minn. Stat. §115A.03 subd. 17a). Minn. Stat. §115A. 9561 subd. 1 prohibits the disposal of major appliances in a mixed municipal solid waste or on the land or in a solid

#### **Goals**

Subsequent to the above policy and prevailing conditions, the goals for major appliance management for this Tri-County plan are broadly defined as:

- 1. Assure a clean and healthy environment by preventing the illegal disposal of appliances in lakes, woods, ditches, and other rural areas; and*
- 2. Comply with state laws on appliance recycling and disposal.*

waste processing or disposal facility.

#### **4.11.1 Existing Programs**

The Counties and Cities in the Tri-County service area include major appliance collections in annual spring and or fall clean-up days. The Tri-County currently contract with Green Tech Recycling to collect, handle, transport, process and ensure the management and processing of collected appliances complies with all State and Federal regulations. Table 4.20 presents the annual quantity of major appliance wastes recovered in the Tri-County. Most cities have spring and fall clean-ups where appliances are collected for various fees.

Currently, Tri-County offers the annual one day special collection event for all County residents. The fee for appliance disposal is \$8.00 per appliance, this fee includes the processing of any hazardous fluids such as oil, antifreeze and mercury switches. It also includes the transportation from the site and further recycling of metal and plastic materials. Tri-County residents can also dispose of appliance year round at the following locations in the area.

1. Green Tech Recycling, 205 West Spring Street, Mankato.
2. Waste Management Transfer Station , 4 miles south of Le Sueur
3. R & R Auto & metal Salvage, 17896 State Hwy 5 & 25, Green Isle.
4. New Ulm Steele & Recycling, 218 19<sup>th</sup> S. Street, New Ulm
5. MWPC, 1051 Summit Avenue, Mankato.
6. LJP Enterprises Recycling Transfer Station, 2160 Ringhofer Drive, North Mankato

**Table 4.20: Annual Quantity of Major Appliance Recovered**

County	Appliance Materials collected / Recycled in tons				
	2008	2009	2010	2011	2012
Le Sueur	178	168	166	166	105
Nicollet	210	193	214	218	220
Sibley	231	94	91	101	97
<b>Total</b>	<b>619</b>	<b>455</b>	<b>471</b>	<b>485</b>	<b>422</b>

*Source: Tri-County Annual SCORE reports and individual County Collections*

#### 4.11.2 Major Appliance Programs to Implement for the next 10 years Programs:

- ❖ Develop and regularly promote appliance recycling opportunities to residents and businesses.
- ❖ Develop and distribute educational materials that describe the benefits from the proper recycling of appliances
- ❖ Develop a list of recyclers in the area who are licensed to process & handle appliances.
- ❖ Continue with organized waste appliance collection drives, especially in the small cities and rural areas.
- ❖ Develop and periodically review enforcement tools on the recycling of appliances in the counties.
- ❖ Identify other appliance disposal options such as rural electric co-ops.

**Table 4.21: Staff Hours Required (FTE) in Implementing the Major Appliance Programs**

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.02	0.01	0.02	.05
Le Sueur	0.03	0.01	0.02	.06
Nicollet	0.02	0.01	0.02	.05
<b>Total</b>	<b>0.07</b>	<b>0.03</b>	<b>0.06</b>	<b>0.16</b>

#### A. Program Budget

Tri-County pays for the advertising of the individual County appliance collection events and Tri-County pays for the part-time staff to work at these events. It should also be noted that each County STS crews are scheduled to work at these collection events as well to

minimize staffing costs. Each County pays for their own disposal at Green Tech Recycling. As mentioned above, residents do pay a subsidized fee to dispose of their appliances at the collection events. The collection fees help pay for appliance recycling / disposal and salaries for the collection events. The costs for these collection events are listed in the Budgets section provided in Appendix 2.

## **B. Implementation Schedule**

The Major Appliance Management Programs are ongoing over the life of this plan.

### **4.12 AUTOMOTIVE MERCURY SWITCHES, MOTOR VEHICLE FLUIDS AND FILTERS, AND LEAD-ACID AND DRY CELL BATTERIES**

#### ***General Policy and Goals***

Automobile manufacturers have been using mercury switches to operate convenience lights for many years. Mercury has unique properties that make it an ideal material to use for electrical connections. A typical mercury switch capsule is made out of steel and contains about 0.8 grams of mercury. When a car's hood is down, for example, the mercury lies flat in its capsule. When the hood is raised, the mercury rolls back in the capsule and completes an electrical circuit which causes a light to go on. Minnesota requires removal of automotive mercury switches before a vehicle is crushed (Minn. Stat. § 116.92, Subd. 4). If mercury switches are not removed, mercury can leak onto the ground surface or onto the metal if the vehicles are crushed for reclamation. When the reclaimed metal is melted down, mercury is released in emissions and eventually deposited on land and water, contaminating our food sources.

Minnesota requires retailers of motor oil to either collect used oil or post signs indicating the nearest location where used oil is accepted. Sibley, Le Sueur & Nicollet are committed to supporting these used oil collection and management activities. The Solid Waste Ordinances for the Tri-County state that waste oil shall not be poured, dumped or unlawfully placed on public or private lands, shore lands, roadways, or waters. Minn. Stat. §115A.932 prohibits the disposal of mercury switches into a solid waste, waste water disposal system, solid waste processing or disposal facility. Similarly, there are prohibitions for the disposal of lead-acid batteries (Minn. Stat. §115A.9152) and dry cell batteries containing mercuric oxide electrode, silver oxide electrode, nickel-cadmium, or sealed lead-acid (Minn. Stat. §115A.9155) into mixed municipal solid wastes.

Used oil, filters, and used oil-contaminated sorbent materials often contain hazardous contaminants, such as flammable fuels and their additives, lead and other toxic metals. Used oil that is disposed of improperly can kill vegetation and wildlife and pollute surface water and groundwater. For this reason, it is illegal to place motor oil or other vehicle fluids as well as motor oil filters in mixed municipal solid waste or in or on land or waters of the state (Minn. Stat §115A.916). Private sector businesses have the ability, networks, and legal mandates to manage problem materials.

Lead acid and dry cell batteries are those made of lead plates, usually encased in plastic and containing an acid electrolyte, such as sulfuric acid. Lead-acid batteries may leak or spill and cause lead and/or acid contamination of the soil and ground water. Because of this, it is a misdemeanor to place a lead acid battery in mixed municipal solid waste or otherwise dispose of a lead acid battery (Minn. Stat. §115A.915). Any person selling lead acid batteries at retail or offering lead acid batteries for retail sale shall accept, at the point of transfer, lead acid batteries from the customer (Minn. Stat. §325E.115). In addition, generators who collect or accumulate spent lead-acid batteries are responsible for proper storage and containment of leaks or spills.

### **Goals**

Subsequent to the above policy and prevailing conditions, the goals for automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries for this Tri-County plan are to:

- 1. Promote environmentally friendly and health-hazard free options for disposing automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries; and*
- 2. Comply with state laws regarding the disposal of automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries.*

#### **4.12.1 Existing Programs**

Tri-County will manage these types of items in an environmentally and economically sound manner, providing appropriate disposal options to rural and urban residents. The goal is to encourage residents to use private sector options for disposal of these types of items whenever practical. The Tri-County Solid Waste Office has developed public awareness programs as part of its waste education program. Automobile fluids, batteries, and motor oil filters are accepted for recycling at participating automobile service centers, at the various disposal facilities and at the Blue Earth County Regional Household Hazardous Waste Facility, the McLeod County Hazardous Waste Facility and the Scott County Hazardous Waste Facility as well. Tri-County residents can bring their automotive fluids such as used motor oil, mercury, oil filters and dry cell batteries to local HHW facilities during business hours. These programs are funded by SCORE funds and special assessment tax revenues. There are private businesses such as Loes Oil Company that takes oil from residents and businesses within the Tri-County area.

Mercury switches can be taken to the all the above mentioned Hazardous Waste facilities for no charge. Collected batteries are stored in containers that act as secondary containment if any battery acid leaks. All of the above facilities store the batteries until a

sufficient quantity has been collected. The batteries are then taken to a local scrap yard to be recycled. Residents are encouraged to obtain a list of recycling locations from Tri-County Solid Waste or the individual County Environmental Services offices.

Section 4.12.2 contains some of these programs which are to be continued and/or modified as well as new programs that are to be implemented for the next ten years. The programs include a continuation of those already in place along with additional educational materials to county residents concerning the proper disposal of automotive mercury switches, motor vehicle fluids, filters, and lead acid & dry cell batteries.

#### 4.12.2 Programs to implement for the next 10 years

- ❖ Establish and promote used oil and oil filter drop-off sites. Work with automotive service businesses to properly collect and dispose of used oil and filters
- ❖ Continue to accept used oil, batteries, and mercury switches at all HHW collection sites and events. Promote take back programs such as used battery program
- ❖ Work with automotive service businesses to ensure that automotive mercury switches, motor vehicle fluids and filters, and lead acid and dry cell batteries are collected and disposed of in a manner that is compliant with state and federal regulations.
- ❖ Identify new opportunities for the collection of automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries.
- ❖ Establish and promote manned and/or unmanned drop-off sites for automotive batteries to encourage proper disposal.
- ❖ Continue to provide public education on the proper disposal of mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries.
- ❖ Educate the public on the dangers of the improper disposal of mercury and mercury spills.

Table 4.22: Staff Hours Required (FTE) in Implementing the Programs for Automotive Mercury, Fluids & Batteries

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.01	0.0	0.01	.02
Le Sueur	0.01	0.0	0.01	.02
Nicollet	0.01	0.0	0.01	.02
<b>Total</b>	<b>0.03</b>	<b>0.0</b>	<b>0.03</b>	<b>0.06</b>

### **A. Program Budget**

The costs for this program is covered under the Hazardous Waste Disposal and Special Waste budget line item accounts listed in the Budgets section provided in Appendix X.X.

### **B. Implementation Schedule**

The Automotive Mercury, Fluids & Batteries Programs are ongoing over the life of this plan.

## **4.13 HOUSEHOLD HAZARDOUS WASTE (HHW)**

### ***General Policy and Goals***

Minnesota counties are required to incorporate a program for the management of household hazardous waste (HHW) generated within county borders into the Solid Waste Management Plan. SCORE legislation requires counties to amend solid waste management plans to include:

- ❖ Broad based public education component;
- ❖ A strategy for reduction of HHW from waste stream; and
- ❖ A strategy for separation of HHW from MSW and the collection, storage, and proper management of the waste.

Successful HHW programs help reduce the toxicity of waste delivered to the Resource Recovery Facilities such as MWPC, RRT and the Wilmarth WTE facility as well as local and regional landfills. The Blue Earth County Regional Household Hazardous Waste Facility, thus helps to ensure better efficiencies, cleaner RDF, safer landfill disposal and that the residuals sent to landfill for disposal are less toxic.

HHW management programs are a partnership between the State and counties, which is supported by the development of a network of regional HHW programs. These programs ensure that permanent collection and handling facilities exist throughout the State and provide assistance for local collection events by individual counties or cities.

## Goals

Subsequent to the above policy and prevailing conditions, the goals for HHW management for this Tri-County plan are to:

1. *Improve on existing disposal opportunities for residents and businesses on proper disposal of HHW products; and*
2. *Promote education on alternatives to HHW products and encourage separation and management of materials containing lead, mercury, and Polychlorinated biphenyls (PCBs) from the waste stream.*

### 4.13.1 Existing Facility and Programs

The existing HHW programs in Sibley, Le Sueur & Nicollet Counties are presented in this section. Sibley, Le Sueur & Nicollet Counties are part of the Blue Earth County Regional HHW program, centered on a regional HHW management facility located in Mankato. Blue Earth County is the regional HHW program sponsor and operates the Blue Earth County Regional Household Hazardous Waste Facility located at 651 Summit Avenue in Mankato and serves five counties. Table 4.23 presents the annual HHW recovered in the Tri-County service area.

**Table 4.23: Annual Quantity of Household Hazardous Solid Waste Recovered**

Hazardous Waste Material	Hazardous waste participation & materials received & processed				
	2008	2009	2010	2011	2012
Household Participants	3,512	3,842	4,795	4,973	4,292
Fluorescent Bulbs (number counted)	6,455	7,040	6,153	7,645	7,614
Latex Paint (in tons)	38.47	38.14	44.99	42.71	43.68
Oil Base Paint (in tons)	22.90	19.50	23.21	22.59	21.36
Fuels (in tons)	3.83	4.28	3.60	3.83	4.50
Used Oil (in gallons)	N/A	375	1050	1165	955
MDA Waste Pesticide (in tons)	3.8	4.0	2.8	3.10	2.45

*Source: SCORE Reporting and Annual Materials reported by the Blue Earth County Facility for all three counties.*

Minnesota Statute 115A.96 defines household hazardous waste (HHW) as a waste generated from household activity that exhibits characteristics of or that is listed as hazardous waste under agency rules, but does not include waste from commercial activities that is generated, stored or present in a household. Household hazardous wastes have the characteristics of being ignitable, toxic, corrosive or reactive. Household hazardous waste may include pesticides, solvents, preservatives, cleaners, paints and other common household products. These wastes may affect the environment by impairing air quality, or by contaminating soil, surface water or groundwater. If improperly managed, household hazardous waste may be ingested, inhaled, or absorbed through the skin.

The Tri-County household hazardous waste program assists the general public in identifying, reducing, proper handling and disposal, and using safer or less-hazardous

alternatives to household hazardous chemicals. An integral part of the education program is an information service to answer the public's questions and provide technical assistance on proper household hazardous waste management. The Tri-County Solid Waste Office also assists small businesses and agricultural chemical users on the proper storage and disposal methods for their hazardous waste. The Tri-Counties will provide education to reduce the amount of household hazardous waste generated, and to limit the disposal of household hazardous waste in landfills and/or processing facilities.

The Tri-County Board and the individual of Sibley, Le Sueur and Nicollet Counties entered into an Agreement with Blue Earth County on February 23, 1993 to co-sponsor a regional household hazardous waste program. The Tri-Counties have extended the contract over the past years with Blue Earth County to December 31, 2017. Blue Earth County is the sponsoring organization and home to the regional facility. Blue Earth County, working closely with the MPCA, has built a 2,880 square foot regional HHW facility. The HHW facility is designed to accept HHW materials from all residents or counties within the region. This facility is intended to serve three functions:

- ❖ Provide a central point for aggregating HHW for proper management;
- ❖ Establish a system for reuse of materials; and
- ❖ Temporary storage of HHW prior to proper disposal.

The Tri-County Solid Waste Office works closely with Blue Earth County to assure adequate staffing levels at the regional facility. Tri-County staff work at the regional facility assisting residents, as well as sorting and processing the wastes received. Tri-County staff has received appropriate MPCA, hazard categorization and emergency first aid training and thus are qualified to work at the regional facility and local mobile collection events. It should also be noted that Sibley County has a reciprocity agreement with McLeod County for its residents to take hazardous waste materials to the facility in Hutchinson, MN during their business hours. Le Sueur County has a reciprocity agreement with its neighboring Scott County for its residents to take hazardous waste materials to the Scott County facility located near Jordon, MN during its posted business hours. These reciprocity agreements have been very successful due to convenience of geographic location for these County residents and the year around business operation availability

In addition to homeowners, the Tri-County also works with small businesses to help them manage their wastes properly, either through Blue Earth County's Very Small Quantity Generators (VSQG) program or through a private hazardous waste disposal company such as Veolia. The Tri-County also works with the Minnesota Department of Agriculture (MDA). The MDA has a waste pesticide program to assist agricultural users and farmers properly dispose of their unneeded and unusable pesticides. Blue Earth County also has a contract with the MDA so that pesticide users can take advantage of the disposal options at the Blue Earth County Regional Facility. This assures that pesticide users have a safe location for disposal year round.

The Tri-County educational activities will be designed to promote awareness, identification and proper management, and waste reduction methods of household hazardous waste. Staff promote proper disposal of household hazardous waste. These activities will be carried out through speakers at various organizational meetings, community gatherings and schools, brochures, one-on-one contact and through radio and newspaper advertising.

Tri-County sponsors mobile collection events in each of the three Counties. The locations change from City to City every year. All residents in all three Counties can participate in these collection events via reciprocity. Residents can bring the same materials to these mobile collection events as they bring to the three main facilities of Blue Earth County, McLeod County and Scott County. The mobile collection events have become very popular due to convenience over the years and these events will continue in the foreseeable future. In addition to these mobile collection events, Blue Earth County has a regional facility that is open seasonally from April through the end of October to the three County residents. The facility is open year round to small businesses and farmers wanting to dispose of ag chemicals. The facility is open every Tuesday from 12:00 noon to 6:00 p.m. and the second Saturday of each month from 8:00 a.m. to 12:30 p.m. Residents from Le Sueur, Nicollet and Sibley Counties can self-haul their household hazardous waste to the Regional Facility at no charge as well as to the McLeod and Scott County facilities.

Tri-County and Blue Earth County staff sort and process the materials received. Useable products that are fairly innocuous in nature (such as latex paint and roofing tars) are checked for quality. Products that are still useable are placed in the product exchange room where they are available free of charge to residents 18 years of age or older. This product exchange area helps to lower disposal costs.

Items that cannot be placed into the product exchange area and processed according to MPCA and disposal company requirements. Once processed the materials are stored in either lab packs or 55-gallon metal MN DOT approved containers. Flammable materials (i.e. oil base paints and fuels) are stored behind the facility in one of two flammable storage buildings. After processing all hazardous material containers are appropriately marked. The containers are checked on a weekly basis for leakage or contamination. When enough containers have been accumulated the facility's regional manager contacts the State's hazardous waste disposal contractor to schedule a pick-up of these drums and containers of materials.

The private contractor (Veolia) must have appropriate training, licenses and certifications of its staff and vehicles. The Tri-County Board has been a co-sponsor with Blue Earth County in the household hazardous waste program since 1993. The program has been extremely successful for the residents and a very cooperative relationship has developed between the Tri-County and Blue Earth County. At this time no changes are anticipated. If opportunities arise for additional programs, better program efficiencies or additional ways to save money, those options will be evaluated as they occur.

Blue Earth County works closely with the Tri-County staff to meet staffing needs at the Blue Earth County’s facility. Tri-County staff have extensive HHW training to meet MPCA requirements per the Agreement with Blue Earth County. County staff of Sibley, Le Sueur and Nicollet are required to help at the Tri-County mobile collections. County staff can handle only limited amounts of materials at the mobile collection sites. All procedures followed at both the Regional Facility and mobile collection events follow MPCA guidelines.

**4.13.2 Household Hazardous Solid Waste Programs to Implement for the next 10 years**

- ❖ Promote the continued use of the Blue Earth County Regional HHW Facility, the McLeod County Household Hazardous Waste Facility and the Scott County Hazardous Waste Facility.
- ❖ Identify and promote to residents and businesses environmentally friendly alternatives to common HHW products. Educate HHW users of take back programs such as the new Paint legislation.
- ❖ Establish and promote HHW collection sites.
- ❖ Establish a regular HHW collection drive, especially in the smaller cities and rural areas.
- ❖ Provide residents with educational material on how to identify, reduce the use of, and properly handle & transport HHW products.
- ❖ Design and implement a program to reward businesses that don't sell products containing lead, mercury, or PCBs.
- ❖ Continue to provide HHW collection to ensure residents have ample opportunities to properly dispose of HHW wastes.

**Table 4.24: Staff Hours Required (FTE) in Implementing the HHW Programs**

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.16	0.20	0.02	.38
Le Sueur	0.17	0.20	0.03	.40
Nicollet	0.17	0.20	0.03	.40
<b>Total</b>	<b>0.50</b>	<b>0.60</b>	<b>0.08</b>	<b>1.18</b>

**A. Program Budget**

There are line item accounts for expenses directly related to HHW such as disposal, labor, supplies and training. The education portion of HHW is included in printing, advertising and education line items. The costs for this program is covered under the Hazardous Waste Disposal and Special Waste budget line item accounts listed in the Budgets section provided in Appendix 2.

**B. Implementation Schedule**

The HHW Programs are mature and will continue to be on going over the life of this plan.

## 4.14 DEMOLITION DEBRIS MANAGEMENT

### ***General Policy and Goals***

Demolition debris or construction debris means; “waste building materials, packaging, and rubble resulting from construction, remodeling, repair, and demolition of buildings and roads” (Minn. Stat., § 115A.03 subd. 7). Demolition debris does not include asbestos wastes. The demolition facilities in all three counties go through a permitting process with the State of Minnesota. This is to provide suitable disposal options for demolition debris that will not harm the soil or waters of the area.

### **Goals**

Subsequent to the above policy and prevailing conditions, the goals for demolition debris management for this Tri-County plan are broadly defined as:

- 1. Provide residents and businesses with opportunities for the disposal of demolition debris; and*
- 2. Ensure that contractors abide by state and federal regulations regarding the disposal of demolition debris. Also educate contractors on the practice of recycling asphalt shingles.*

### **4.14.1 Existing Programs**

The Tri-County will ensure that residents know of the proper disposal options that are available for demolition waste. Bulky demolition and construction debris needs to be disposed of separately from general mixed municipal solid wastes because disposal can take place in a less costly landfill than for mixed municipal solid waste. The Tri-County will ensure that convenient, safe, and environmentally responsible facilities are available for citizens and businesses to dispose of demolition debris. Also education will be provided on where to take materials and what is not allowed at demolition debris facilities. Education materials will provide information on reducing, reusing, or recycling construction and demolition debris materials to the maximum extent practicable.

Nicollet County has one demolition landfill, Valley Demolition and Recycling located between Courtland and New Ulm, MN. Valley Demo is permitted to accept industrial (construction) waste. Residences and business can also dispose of demolition materials at SMC Demolition Landfill in Mankato, and Hansen Recycling and Transfer Station in Kasota, MN. Dem Conn located near Shakopee, MN is another demolition facility that is also used by Le Sueur and Sibley County residents. Demolition debris can also be disposed of at the Waste Management Transfer Facility located south of Le Sueur but the material is then transported to a dedicated demolition landfill. Small amounts of demolition debris are

handled on site under the MPCA’s permit by rule process. Table xx presents the annual and projected tons of demolition in the Tri-County service area.

**Table 4.25: Annual Quantity of Recovered Demolition Debris**

County	Demolition Materials Recovered				
	2011	2013	2014	2015	2016
Le Sueur	4,650	5,480	5,325	4,540	4,480
Nicollet	4,140	4,240	4,495	4,600	4,850
Sibley	2,396	2,415	2,320	2,330	2,280

There is no specific policy or plans for the development of a demolition landfill in the area. Demolition debris is required to be disposed of at a permitted facility. The Tri-County and individual County solid waste officers direct residents with demolition debris to one of the nearby permitted facilities. Small amounts of demolition material may be disposed of in the MSW waste stream. The SMC Demfill Facility, located in Blue Earth County, is heavily used by residents and commercial entities in the Tri-County area. According to MPCA’s ‘What’s in My Neighborhood the following “Permit By Rule” facilities are listed within the Tri-County service area.

**Table 4.26: Permitted Demolition Debris Facilities and Number of Permits-by-rule**

County	Site Name	Location	Permit	Status
Le Sueur County	City of LeSueur Compost	Railroad St, Le Sueur	PBR000682	Active
	Cleveland city of	Address Unknown, Cleveland	PBR000639	Active
	Fessel's Wood Recycling	Waterville Township	PBR000980	Active
	Center Point Energy - Gas	Sharon St SW, Lexington	DEM00200	Active
	Le Center Residence	240 W Washington St, Le	DEM00135	Active
	Montgomery Compost Site	201 Ash Ave SW,	PBR000667	Active
	Saint Peter Compost Site	Address Unknown, Kasota	PBR001034	Active
Nicollet County	Countryside Refrigeration & Heating Inc.	1425 Lookout Dr., North Mankato, MN	PBR000899	Active
	LJP Enterprises	1720 Gault St., St. Peter, MN	PBR000596	Active
	Lafayette WWTP	50 9 <sup>th</sup> St., Lafayette Township	PBR000520	Active
	Larry Luepke	54611 Co Road 21, Courtland	PBR000910	Active
	New Ulm Quartzite Quarry	45755 571 <sup>st</sup> Ln., New Ulm, MN	PBR000906	Active
	Richard Kosek	49889 506 <sup>th</sup> St., Courtland	PBR000898	Active
	St. Peter Compost Site	1128 Swift St., St. Peter, MN	PBR000694	Active
Sibley County	RSI Recycling Inc - Green Isle	425 S 5th St., Washington Lake Township	PBR000921	Active

**4.14.2 Demolition Debris Management Programs to Implement for the next 10 years**

- ❖ Educate residents and businesses of demolition drop off sites. Educate construction contractors of asphalt shingle recycling / grinding options in the area.
- ❖ Host an annual educational forum with contractors and MPCA staff to ensure that contractors are aware of state and federal regulations on the proper disposal of demolition debris.

- ❖ Develop and periodically review enforcement tools on the disposal of demolition debris in the counties.

Table 4.27: Staff Hours Required (FTE) in Implementing the Demolition Debris Programs

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.01	0.0	0.03	.04
Le Sueur	0.01	0.0	0.03	.04
Nicollet	0.01	0.0	0.03	.04
<b>Total</b>	<b>0.03</b>	<b>0.0</b>	<b>0.09</b>	<b>0.12</b>

### A. Program Budget

The costs for this program is covered under the Demolition Waste budget line item accounts listed in the Budgets section provided in Appendix X.X.

### B. Implementation Schedule

The Demolition Programs are ongoing over the life of this plan.

## 4.15 ON-SITE AND ILLEGAL DISPOSAL

### *General Policy and Goals*

Minnesota Statutes require counties to develop plans and programs for mitigating the environmental risks associated with on-site and illegal disposal. A program to reduce on-site disposal should seek to combine a number of factors: make service convenient and affordable, enforce policies and procedures consistently, and provide education about the environmental hazards of on-site disposal. The goals and programs outlined here are aimed at providing such mitigation and education measures.

### **Goals**

Subsequent to the above policy and prevailing conditions, the goals for on-site and illegal disposal for this Tri-County plan are broadly defined as:

1. *Increase participation of rural residents in the waste management system; and*
2. *Use enforcement to discourage illegal dumping practices, especially in lakes, woods, ditches, and other rural areas.*

### 4.15.1 Existing Programs

Illegal disposal of refuse is a concern of Tri-County. Current individual County Solid Waste Ordinances prohibits illegal dumping and has provisions regarding the proper storage, collection and transportation of solid waste. The County Solid Waste Officer is responsible for enforcing the ordinance usually under the P & Z and sometimes along with the help of a Sheriff's Deputy, local Conservation Officer or MPCA Enforcement Staff. If an illegal

dumping violation is encountered, or a complaint registered, the site is inspected and pictures are taken. The property owner and others are interviewed regarding the problem. The waste is investigated for possible identification of any contributors. Any hazardous materials are secured or arrangements are made to take proper care of these materials. Letters are then sent to the property owner and any identified waste contributors indicating the specific violations of any rules or ordinances and a time frame to clean up the property.

The site is revisited and, if not cleaned up, the solid waste officer will work with the County Attorney and law enforcement officials to correct the problem. Enforcement of the Solid Waste Ordinance has not been a problem. In response to illegal dumping, Tri-County also promotes proper disposal options for residents through education. In addition, subsidized, mobile collections are provided to residents to help reduce the amount of material illegally dumped. Many of the municipalities have prepared wellhead protection plans that address the presence of contamination of groundwater. This includes well sealing of abandoned wells as well as additional methods to reduce the risk of harm to the environment and human health from potential contamination.

#### 4.15.2 On-site and Illegal Disposal Management Programs to Implement for the next 10 years

- ❖ Inform rural residents and businesses of what is already working in rural areas such as the Granby/ Nicollet Township solid waste and recycling contract for both Township residents. Establish regularly scheduled drop-off times at rural drop off facilities and reduce disposal fees for self-haulers. Promote Rural Ag Bag collection sites
- ❖ Expand disposal options, through either manned or unmanned drop-off sites throughout the county.
- ❖ Provide educational materials to residents and businesses that emphasize the environmental and health risks associated with on-site disposal. Distribute “Burn Barrels Brochures.
- ❖ Use enforcement tools to further discourage illegal disposal practices.

Table 4.28: Staff Hours Required (FTE) in Implementing the Illegal Disposal Management Programs

Jurisdiction	Tri-County Director	Tri-County Part-Time Staff	County Solid Waste Officer	Total
Sibley	0.01	0.0	0.06	.07
Le Sueur	0.01	0.0	0.06	.07
Nicollet	0.01	0.0	0.06	.07
<b>Total</b>	<b>0.03</b>	<b>0.0</b>	<b>0.18</b>	<b>0.21</b>

#### A. Program Budget

The costs for this program is covered under the Demolition Waste budget line item accounts listed in the Budgets section provided in Appendix X.X.

## B. Implementation Schedule

The Demolition Programs are ongoing over the life of this plan.

### 4.16 SUMMARY OF PLAN EVALUATION AND IMPLEMENTATION

Figure 4.1 summarizes the total number of programs to be implemented over this 10 year planning period. Out of a total of 91 programs to be implemented for the next 10 years, the majority of programs to be implemented (approximately 18%) are geared towards solid waste education. Creating the necessary awareness through educational programs is central in achieving the waste reduction, re-use and recycling targets set for the next 10 years. The annual cost estimates in managing solid waste in the Tri-County service area have been presented in Figure xx. The estimated average annual revenue to cost ratio for this 10 years plan period is 1.03. This means that each year’s estimated revenue exceeds the cost by an average of 3%. The budget projections are estimates that are subject to change depending on legislative mandates, SCORE funding, special assessment tax revenues and program cost. The projections are also subject to the prevailing inflation rate. An assumed inflation rate of 2.4% was used for the projections. Appendix xx, presents the details of the budget by jurisdiction (Le Sueur, Nicollet and Sibley Counties as well as the Tri-County). Table 4.29 also shows the total staffing requirements in implementing the programs.

Figure 4.1: Summary on the Number of Solid Waste Programs to be implemented for the next 10 years

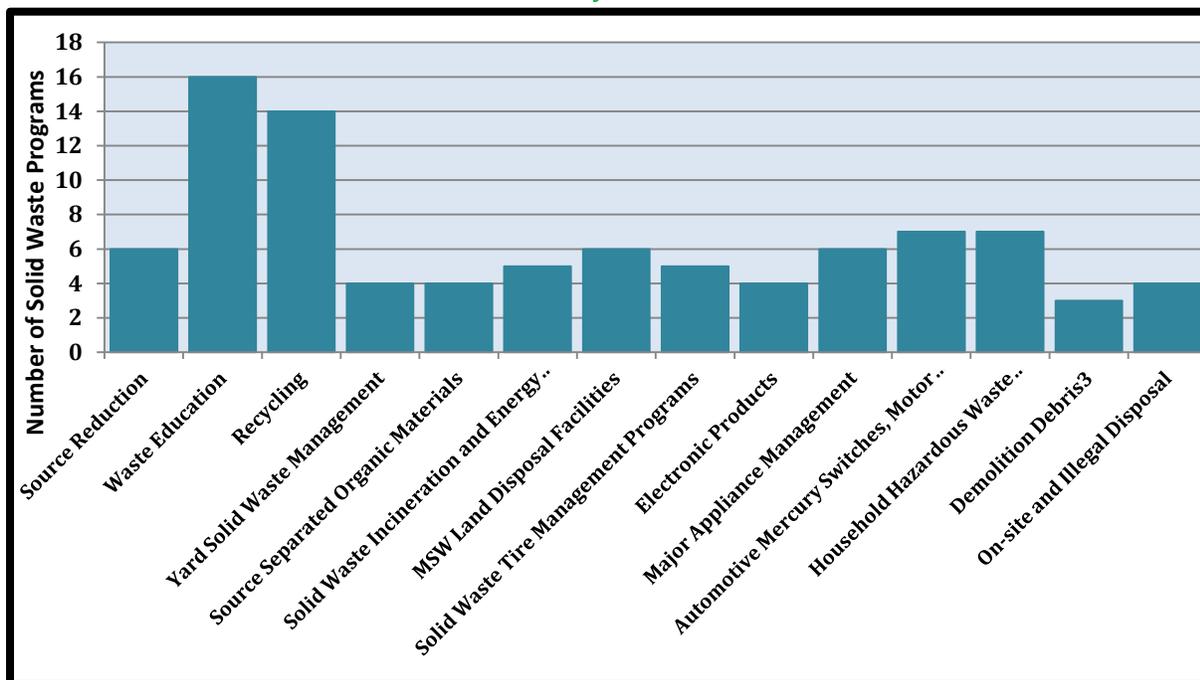


Figure 4.2: Total Estimated Annual Budget for Le Sueur, Nicollet, and Sibley Counties as well as the Tri-County Office

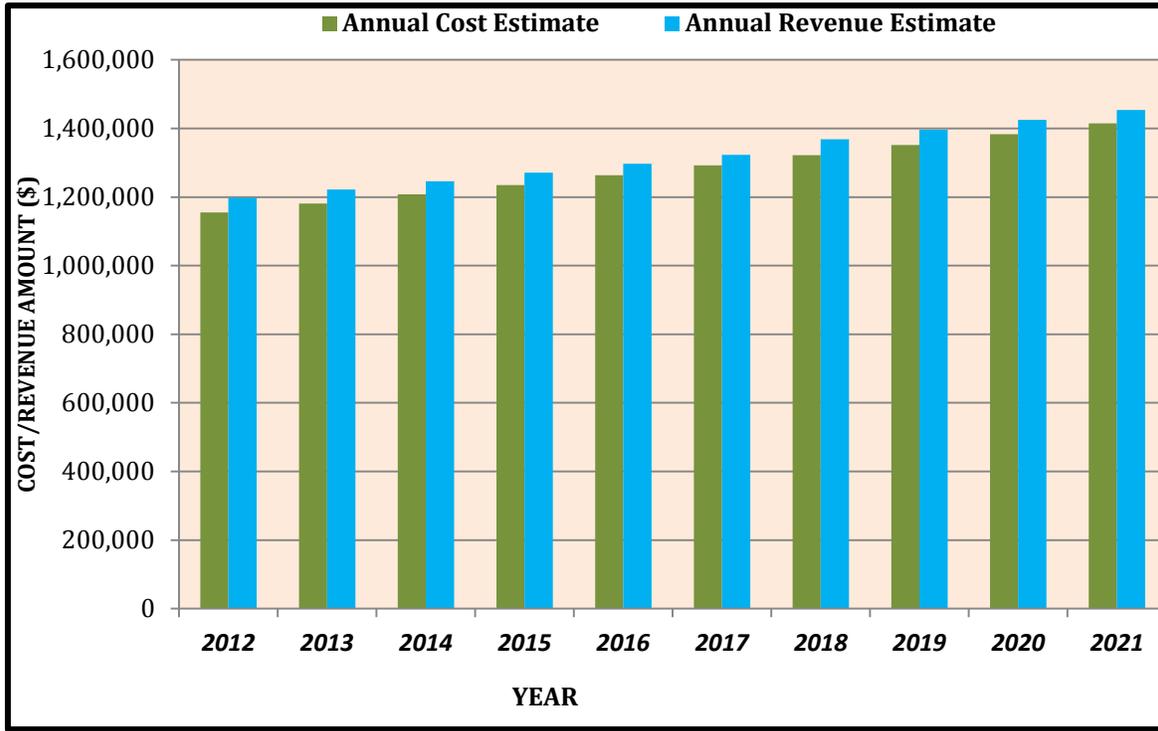


Table 4.29: Estimated Staffing Requirements in Implementing the Programs

Program or Task	SW Director	Part-Time Staff	Solid Waste Officer	Total FTE	Hours
Waste Reduction	0.09	0.02	0.1	0.21	437
Education-SW	0.25	0.15	0.15	0.55	1144
Recycling Programs	0.27	0.08	0.15	0.5	1040
Yard Waste Programs	0.03	0	0.03	0.06	125
SSOM	0.03	0	0.04	0.07	146
Resource Recovery	0.06	0.03	0.04	0.13	270
MSW Land Disposal	0.03	0.03	0.03	0.09	187
Tire Management	0.07	0.03	0.06	0.16	333
Electronic Waste	0.07	0.03	0.06	0.16	333
Appliance Management	0.07	0.03	0.06	0.16	333
Automotive Waste	0.03	0	0.03	0.06	125
HHW	0.5	0.6	0.08	1.18	2454
Demo Debris	0.03	0	0.09	0.12	250
Illegal Disposal	0.03	0	0.18	0.21	437
Totals	1.56	1	1.1	3.66	7,613

## **CHAPTER FIVE – FRAMEWORK FOR PLAN IMPLEMENTATION, REVIEW, MONITORING AND EVALUATION**

### **5.1 INTRODUCTION**

All three of our Counties (Sibley, Le Sueur & Nicollet) have separate County Solid Waste Management Ordinances that each County is individually responsible to educate, implement and enforce if necessary within its own legal County boundaries. All three County ordinances are similar in nature generally speaking addressing common solid waste related issues. The following sections will summarize each of the three separate County ordinances.

### **5.2 TRI- COUNTY SOLID WASTE ORDINANCE**

#### ***5.2.2 Sibley County***

The Sibley County Ordinance was originally created and signed into effect in 1983. It was amended in 1990 and amended again in 1992. The Sibley County Ordinance addresses various items under MN Stats. 115, 115A, 116 and 400.

The following items summarize the Sibley County Ordinance:

- ❖ Solid waste management operations & definitions;
- ❖ Solid waste licensing, siting, permitting & operation requirements of solid waste & recycling facilities;
- ❖ Duties & responsibilities of the County Solid Waste Officer & Attorney;
- ❖ Solid waste storage & containers;
- ❖ Collection & transportation & reporting of solid waste & recyclables;
- ❖ Solid waste collection fees from solid waste haulers and local units of governments;
- ❖ Volume and weight based fees & collection requirements;
- ❖ Hauler reporting requirements;
- ❖ Solid waste incineration and energy recovery facilities;
- ❖ Intermediate solid waste disposal facilities;
- ❖ Variance, violations & enforcement process; and
- ❖ Service charge & special assessment fee rates and collection process.

#### ***5.2.3 Le Sueur County***

The Le Sueur County Ordinance was originally adopted by the County Board in March of 1988. It was amended in 1991, 1992, and lastly in 1993. The Le Sueur County Ordinance addresses various items under MN Stats. 115, 115A, 116, 145.22, 375, 400, 561.01 and 609.74.

The following items summarize the Le Sueur County Ordinance:

- ❖ Addresses matters of Public health, Public nuisances & groundwater protection;
- ❖ Solid waste management operations & definitions;
- ❖ Authority of the County Solid Waste Officer & County Attorney;

- ❖ The application, sighting and permitting process & requirements of solid waste, recycling, demolition, mixed municipal solid waste, MSW processing transfer stations and storage facilities;
- ❖ Solid waste storage& containers;
- ❖ Collection & transportation & reporting of solid waste & recyclables;
- ❖ Rural recycling collection requirements;
- ❖ Solid waste collection fees from solid waste haulers and local units of governments;
- ❖ Volume and weight based fees & collection requirements;
- ❖ Hauler reporting requirements;
- ❖ Solid waste incineration and energy recovery facilities;
- ❖ Variance, violations & enforcement process; and
- ❖ Service charge & special assessment fee rates and collection process.

#### **5.2.4 Nicollet County**

The Nicollet County Solid Waste Ordinance was originally adopted in 1972. It was last amended in 1992. The Nicollet County Ordinance addresses various items under MN Stats. 115, 116, 400 and 403.

The following items summarize the Nicollet County Ordinance:

- ❖ Solid waste management operations & definitions;
- ❖ Solid waste licensing, sighting, permitting& operation requirements of solid waste & recycling facilities;
- ❖ Duties &responsibilities of the County Solid Waste Officer& Attorney;
- ❖ Solid waste storage& containers;
- ❖ Collection & transportation & reporting of solid waste & recyclables;
- ❖ Solid waste collection fees from solid waste haulers and local units of governments;
- ❖ Volume and weight based fees & collection requirements;
- ❖ Hauler reporting requirements;
- ❖ Solid waste incineration and energy recovery facilities;
- ❖ Variance, violations & enforcement process; and
- ❖ Open Burning Restrictions.

### **5.3 CURRENT PROBLEMS WITH ORDINANCE ENFORCEMENT**

Counties have the authority to regulate solid waste management within their borders through county ordinances. It is in their best interest for Counties to review their ordinances periodically to assure compliance with the most recent requirements of state law and to stay current in regards to facility licensing, hauler licensing, land disposal restrictions for various waste stream components, special management requirements for waste tires, household hazardous waste, appliances, batteries and other materials, and compliance enforcement.

The existing solid waste ordinances for all three Counties provides guidance on licensing, fees, disposal options for solid waste, enforcement and violations. Recent amendments to each of the three County solid waste ordinances were in 1992 & 1993. Le Sueur County requires that refuse collection services may not dispose of any recyclables in or on the land, nor through incineration unless given prior written approval to do so. Municipalities or Townships within Le Sueur County that contract for refuse collection service must include recyclables collection as part of their contract. Municipalities or townships within Le Sueur County that provide refuse collection service directly, may provide an alternative recyclables collection method provided the alternative method collects recyclables quantities from their jurisdiction that are similar to recycling quantities collected by curbside programs in other Le Sueur County municipalities or townships.

### **5.3.1 Plans to Develop or Amend Ordinances**

Sibley, Le Sueur & Nicollet Counties current ordinances have not created any implementation or enforcement issues. However, the management of solid waste has changed since the most recent amendments to the solid waste ordinance. It is the intent of Tri Counties to continue to review and update the solid waste ordinance, at a minimum, as required by state and federal law. Nicollet and Sibley Counties will consider amending their ordinances to encourage municipalities within their counties that contract for refuse collection service must include recyclables collection as part of their contract. The ordinances are currently in compliance with all state laws and local conditions. Copies of the most up to date ordinances for all three Counties (including adopted amendments) can be found in the Appendix 6.

Depending on the availability of funds, the Tri Counties are planning to review and update the ordinances in order to make efforts toward waste reduction, meeting recycling goals and to support the preferred systems for managing solid waste over the next five year period.

- ❖ **Volume-Based Fees** - Implementing a volume-based rate system offers several benefits. These benefits include an incentive to customers to reduce the amount of waste generated, making rates equitable, increasing support for recycling programs and delays or avoid mandatory recycling.
- ❖ **Other Financial Incentives for Waste Abatement** - The Counties will continue to seek out additional financial incentives or funding sources to promote waste abatement.
- ❖ **Licensing of Haulers and Facilities** - All three (3) Counties require a license for all solid waste haulers operating within the County boundary. County ordinances also require a facility license to manage solid waste and recycling within the County.
- ❖ **Demolition Waste** - Demolition waste management facilities available for residents in the Tri County area are privately owned and operated. These facilities will continue to be privately owned and operated in the Tri Counties and there are no plans for future construction or operation of a demolition landfill.

## **5.4 MITIGATION EFFORTS OF ENVIRONMENTAL AND PUBLIC HEALTH IMPACTS**

As well planned and thought out a solid waste management method or technology may be, there is still a certain level of risk for environmental and/or public health impacts associated with its use and operations. These associated risks are important factors to consider during the planning process as various solid waste management alternatives are evaluated by a county. In previous chapters, environmental risk has been identified and discussed throughout this plan. In addition, risks associated with on-site disposal and illegal dumping will be addressed in this section.

### **5.4.1 On-Site Disposal of MSW by Farms or Households**

On-site disposal of non-hazardous waste from a single family farm household, a member of which is the owner, occupant or lessee of the property, is allowed without a license, if operated and maintained in a nuisance-free and aesthetic manner in Sibley, Le Sueur & Nicollet Counties. Under Minnesota law, only farmers are allowed to bury or burn solid waste generated from the household and farming operation, if the burying is done in a nuisance free, pollution free and aesthetically acceptable manner on the land used for farming. People living on a farm, but not actively farming, are not eligible for this exception to State law (Minnesota Statute, Section 17.135). The County Boards have the option to require solid waste collection by passing a resolution that states solid waste collection services are reasonably available throughout the County but so far Sibley, Le Sueur and Nicollet Counties have not done so.

Under 17.135, which specifically disallows farmers from burying or burning tires, most plastics, HHW, appliances, household batteries, used motor oil or lead-acid batteries from motor vehicles. It also states that a permit is not required from a state agency, except under Minn. Stat. §§ 88.16, 88.17, and 88.22 (open burning permits). The County Boards may prohibit the deposit of other solid waste within the County through additional ordinances in the future.

This farm exemption is a limited exemption to the requirement that a permit of PBR be obtained for disposal of waste. It does not allow burning of prohibited materials, and it does not allow uncontrolled disposal of large quantities of waste from a commercial farming business that could not be considered a “person” and which does not operate as a “household”. The farm exemption also does not allow the unpermitted disposal of demolition debris because demolition debris is not normally generated by the household of farming operation. However, clean wood can be burned under an open burning permit.

Enforcement of ordinance issues is done by individual County solid waste officers and sometimes by the County Attorney or Sheriff’s department staff as well. Enforcement is done on a case-by-case basis depending on the conditions of the situation. Enforcement of the Solid Waste Ordinance has not been a problem. On-site disposal for certain situations, including, but not limited to the demolition of farm buildings, trailers, and fencing is regulated by the State. A Permit-by-Rule currently allows for some instances of waste to be

buried on-site. This permit must be completed by the person wishing to dispose of the waste material and submitted to the MPCA for approval. The permit is reviewed by the solid waste officer of the County prior to the MPCA.

**Table 5.1: Staff Hours in Managing On-Site Disposal of MSW by Farms or Households**

<b>Jurisdiction</b>	<b>Tri-County Director</b>	<b>Tri-County Part-Time Staff</b>	<b>County Solid Waste Officer</b>	<b>Total</b>
Sibley	0.01	0.0	0.03	.04
Le Sueur	0.01	0.0	0.03	.04
Nicollet	0.01	0.0	0.03	.04
<b>Total</b>	<b>0.03</b>	<b>0.0</b>	<b>0.09</b>	<b>0.12</b>

### 5.4.2 Illegal Disposal

Illegal disposal of refuse is a concern of the Tri Counties. Complaints of illegal dumping are occasionally filed with the County Sheriff's Office, the Department of Natural Resources or the Minnesota Pollution Control Agency. Current County Solid Waste Ordinances prohibits illegal dumping and has provisions regarding the proper storage, collection and transportation of solid waste. All Counties encourages voluntary compliance through direct dialogue with the alleged violators.

The County solid waste officer is responsible for enforcing the ordinance. If an illegal dumping violation is encountered, or a complaint registered, the site is inspected and pictures are taken. The property owner and others are interviewed regarding the problem. The waste is investigated for possible identification of any contributors. Any hazardous materials are secured or arrangements are made to take proper care of these materials. Letters are then sent to the property owner and any identified waste contributors indicating the specific violations of any rules or ordinances and a time frame to clean up the property. The site is revisited and, if not cleaned up, the solid waste officer will work with the County Attorney and law enforcement officials to correct the problem. Enforcement of the Solid Waste Ordinance has not been a problem.

In response to illegal dumping, Sibley Le Sueur & Nicollet Counties also promote proper disposal options for residents through education. In addition, subsidized, mobile collection events are provided to residents to help reduce the amount of material illegally dumped. Many of the municipalities have prepared wellhead protection plans that address the presence of contamination of groundwater. This includes well sealing of abandoned wells as well as additional methods to reduce the risk of harm to the environment and human health from potential contamination.

### 5.4.3 Alternatives to the Proposed Integrated Solid Waste System

This section deals with the processes to evaluate and, identify and implement specific alternatives if Tri-County's integrated system is not developed or has major operational difficulties. Section 3.6.1 under Chapter 3 provides a detailed discussion on such

alternatives. Section 1.4 under Chapter 1, also provides an executive summary of the alternatives discussed.

## **5.5 MULTI-COUNTY PLANNING AND PUBLIC PARTICIPATION PROGRAM**

The Tri County Solid Waste Plan used Stakeholder participation in the planning process. Stakeholder members consist of the Tri-County Solid Waste full board members, Tri-County Executive Sub-Committee members, Sibley, Le Sueur and Nicollet County Solid Waste Officers, our Citizen Advisor - Member-At-Large, private waste haulers, Blue Earth County Environmental Services staff, private citizens, Minnesota Pollution Control Agency (MPCA) staff and Region Nine staff. The Tri-County Solid Waste joint powers board meets on a quarterly basis or a minimum of four (4) times per year, additional full board and Executive Sub-Committee meetings are held throughout the year and are open to the Public. Meetings are also conducted with Private Haulers, Businesses, City Administrative Staff, Civic Groups, Region Nine staff and Township Board members to discuss any and all related solid waste and recycling issues, ordinances and State Statutes under Minn. Stat. § 473 and Minn. Stat. § 115A.

In 2012 and 2013 Tri County held extensive multi – county Board meetings to discuss the solid waste plan, the integrated system, possible changes to the integrated system and the planning process. Tri County Board meetings are open to the public and annually, the Tri County Board approves an official newspaper (the Gaylord Hub) to print the meeting agenda and proceedings. Individual County ordinances, resolutions and plans are available at County offices or on-line.

The Plan has been presented to the Stakeholder members for their comments and review. The Plan is then sent to the full Tri County Joint Powers Board for their approval and vote to send to the MPCA to proceed in the Public Notice process. Upon the MPCA's preliminary decision to approve the Plan, the MPCA shall provide public notice for public comment. The Plan will be placed on public notice by the MPCA and will be available for review and comment for thirty (30) calendar days.

After the thirty-day public comment period, the MPCA and each individual County Board of Commissioners shall consider all information received in making a final decision on the Plan and its approval.

### **5.5.1 Documentation Location**

Following are the locations of documentation of discussion and public input by interested parties, including citizens, public advisory committees, regional authorities, local units of government and waste service companies:

1. Official Minutes:  
**Tri-County Solid Waste Joint Powers Board**  
Tri-County Solid Waste Office  
Sibley County Courthouse

400 Court Avenue  
Gaylord, MN 55334  
(507) 237-4321

2. Official Minutes:

**Le Sueur County Board of Commissioners**

County Auditor's Office  
Le Sueur County Courthouse  
88 South Park Avenue  
Le Center, MN 56057  
(507) 357-2251

3. Official Minutes:

**Nicollet County Board of Commissioners**

County Administrators Office  
Nicollet County Courthouse  
501 South Minnesota Avenue  
St. Peter, MN 56082  
(507) 931-6800

4. Official Minutes:

**Sibley County Board of Commissioners**

County Administrators Office  
Sibley County Courthouse  
400 Court Avenue  
Gaylord, MN 55334  
(507) 237-7800

5. Solid Waste Media File:

Tri-County Solid Waste Office  
Sibley County Courthouse  
400 Court Avenue  
Gaylord, MN 55334  
(507) 237-4321

6. Official City Council Minutes:

Office of City Clerk/Administrator  
Jurisdictional City

**5.6 REVIEW PROCESS AND TIMELINES - Documentation of the Ongoing Process**

Public participation is an essential element of successful solid waste management planning and program implementation, therefore, the public participation program should be ongoing.

The Tri-County Solid Waste Joint Powers Board and the individual County Boards hold meetings where the solid waste plan is discussed. All media sources and city clerks are

notified of the meetings and encouraged to attend. In addition, notice of the plan's status is on the Tri-County's web page [http://www.co.sibley.mn.us/tricounty\\_swo](http://www.co.sibley.mn.us/tricounty_swo). Comprehensive minutes are kept from the actions of the Board. These minutes are available for public review.

The Tri-County and individual county boards will continue to focus on solid waste management issues, and encourage public participation in board discussions. The process of publicizing meeting agendas includes notices to all cities and media sources. Official minutes are available for public scrutiny as per state statute.

The Tri-County Solid Waste Office will continue to provide an aggressive public information and education program through in-school programs, exhibits at the three county fairs and other special events, and the local Tri-County clearinghouse. The Tri-County Solid Waste Office will update residents and businesses through periodic letters and press releases sent to local communities and groups and media sources, as is currently the case. Copies will be kept on file for review.

The Tri-County Solid Waste Office will actively cultivate further media coverage of all aspects of local, regional, and state solid waste issues. Further, the media file will be continued and remain available for public review.

The Tri-County staff will continue to respond to individual information requests. These will be documented and kept in office files as they can provide a program history as well as being a bellwether for future trends and actions.

The Tri-County Board meets a minimum of four times a year. During these quarterly meetings, the Board reviews the on-going seasonal programs by assessing participation levels, expenses related to these programs measured with the success or short-comings of these programs along with comments received from residents, businesses and civic groups. This review process will be a part of this 10-year plan.

#### **5.6.1 Solid Waste Staffing/Advisory Member**

The Tri-County Board is made up of two commissioners from each participating county, plus one staff person from each county to serve as ex-office members. The Board meets as deemed necessary and called by the chairperson. The Director's primary role is to assist the Tri-County Board in reviewing information and to add input into the decision-making process regarding solid waste planning and implementation at the regional level.

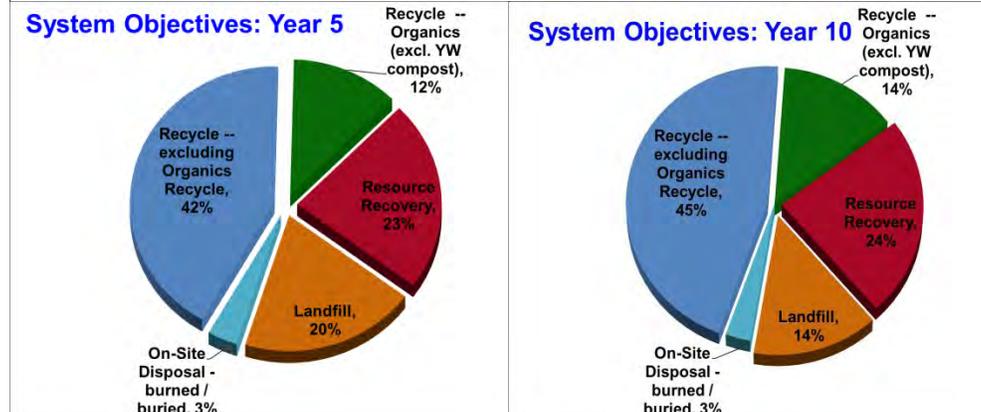
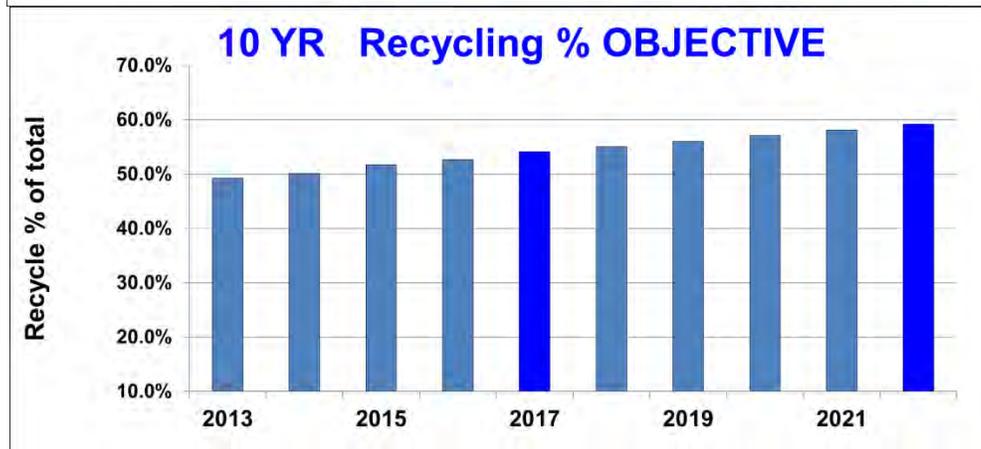
Gene Isakson, an ex-officio member of the Tri-County Solid Waste Joint Powers Board, serves as a citizen member to the board. Mr. Isakson has extensive experience in the solid waste field and provides suggestions and input on numerous solid waste and recycling issues.

# APPENDICES

## APPENDIX 1: GOAL-VOLUME TABLES

### A. REGIONAL GVT

Planning Year #	2011	<u>2013</u> Planning Yr 1	<u>2014</u> Planning Yr 2	<u>2015</u> Planning Yr 3	<u>2017</u> Planning Yr 5	<u>2022</u> Planning Yr 10
<b>MANAGEMENT METHOD OBJECTIVES for the County MSW Solid Waste Management System</b>						
<b>Source Reduction</b>						
Recycle -- excluding Organics Recycle	36.4%	38.5%	39.1%	40.4%	42.1%	45.6%
Recycle -- Organics (excl. YW compost)	10.5%	10.7%	11.0%	11.3%	12.0%	13.7%
Resource Recovery	21.8%	21.9%	22.0%	22.3%	22.7%	23.7%
Landfill	27.7%	25.2%	24.3%	22.4%	19.7%	14.3%
On-Site Disposal - burned / buried	3.7%	3.7%	3.6%	3.5%	3.4%	2.8%



Planning Year #	2011	2013	2014	2015	2017	2022	10Yr Totals
		Planning Yr 1	Planning Yr 2	Planning Yr 3	Planning Yr 5	Planning Yr 10	
<b>SYSTEM OBJECTIVES</b>							
Recycle -- excluding yard waste	46.8%	49.2%	50.2%	51.7%	54.1%	59.3%	
Resource Recovery	21.8%	21.9%	22.0%	22.3%	22.7%	23.7%	
Landfill	27.7%	25.2%	24.3%	22.4%	19.7%	14.3%	
On-Site Disposal - burned / buried	3.7%	3.7%	3.6%	3.5%	3.4%	2.8%	
<b>Recycling % Detail</b>							
Residential recycling %	5.0%	5.3%	5.7%	6.4%	7.5%	9.2%	
Commercial recycling %	25.6%	27.5%	27.8%	28.3%	28.9%	31.1%	
Organics Recycling (source separated food to people & livers)	10.5%	10.7%	11.0%	11.3%	12.0%	13.7%	
Mechanical /Hand Sorted @ Res Rec Fac.	0.9%	1.0%	1.0%	1.0%	1.0%	1.1%	
Banned Problem Materials + Other recycle	4.8%	4.7%	4.7%	4.7%	4.6%	4.3%	
Percent of Total MSW	46.8%	49.2%	50.2%	51.7%	54.1%	59.3%	
Total MSW Generated	71,000	71,000	72,000	72,000	73,000	76,000	736,000
<b>10Yr Totals</b>							
On-Site Disposal - bury, burn barrel, open burn -- tons	2,600	2,600	2,600	2,600	2,500	2,100	24,178
<b>Recycling - tons</b>							
Residential	3,500	3,800	4,100	4,700	5,500	6,900	55,000 tons
Commercial/ Industrial/ Institutional - documented	18,130	19,600	19,900	20,500	21,200	23,500	215,100 tons
Organics Recycle (s. separated commercial & residential)	7,410	7,600	7,900	8,200	8,800	10,300	89,800 tons
Mechanical / Hand Sorted @ Res Rec Fac.	660	700	700	700	700	800	7,600 tons
Problem Materials - Banned + Other recycle	3,370	3,400	3,400	3,400	3,400	3,200	32,900 tons
RECYCLING total tons	33,100	35,100	36,000	37,500	39,700	44,800	400,400 tons
<b>Resource Recovery -tons tipped</b>							
Ramsey/Washington (Newport) RDF Facility - tons tipped	17,350	17,515	17,680	18,080	18,610	19,825	187,000 tons
Prairie Land Facility	-	80	140	200	265	495	2,900 tons
Total RR Facilities MSW Tipped	17,350	17,595	17,820	18,280	18,875	20,320	190,000 tons
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
<b>Landfill - MSW from within the County to LF - tons</b>							
	19,600	19,800	19,300	18,200	16,700	13,300	165,200 tons
<b>LANDFILL DISPOSAL DISTINATIONS for Tri-County's MSW</b>							
Spruce Ridge (Mc Leod County)	13,700	12,900	12,600	12,000	11,100	8,900	109,000 tons
Ponderosa (Blut Earth County)	4,600	6,000	5,800	5,400	4,900	3,900	49,000 tons
Brown Co.	1,300	900	900	800	700	600	7,500 tons
Out-of-State Landfills	-	-	-	-	-	-	- tons
	-	-	-	-	-	-	- tons
	-	-	-	-	-	-	- tons
Total All Co's MSW to ALL LF's - tons	19,600	19,800	19,300	18,200	16,700	13,300	165,200 tons
LF Capacity USED + Cover - for ALL Co MSW -cy	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0! cu yds
<b>LANDFILL DISPOSAL of Solid Waste at landfills located WITHIN the COUNTY</b>							
MSW GENERATION to LF	-	-	-	-	-	-	- tons
All MSW Imported to LF in the Co. - tons	-	-	-	-	-	-	- tons
TOTAL MSW to - tons	-	-	-	-	-	-	- tons
Industrial & non-MSW Waste to MSW LF's in the Co. - tons	1,400	1,400	1,500	1,500	1,600	1,700	15,800 tons
Total Solid Waste to LF within Co. - tons	1,400	1,400	1,500	1,500	1,600	1,700	15,800 tons
LF Capacity USED + cover for ALL Wastes -cu yds	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0! cu yds
<b>Yard Waste - received at YW sites in County</b>							
Yard Waste - received at YW sites in Co. - Cu Yds	20300	20500	20700	21700	23000	25500	cu yds

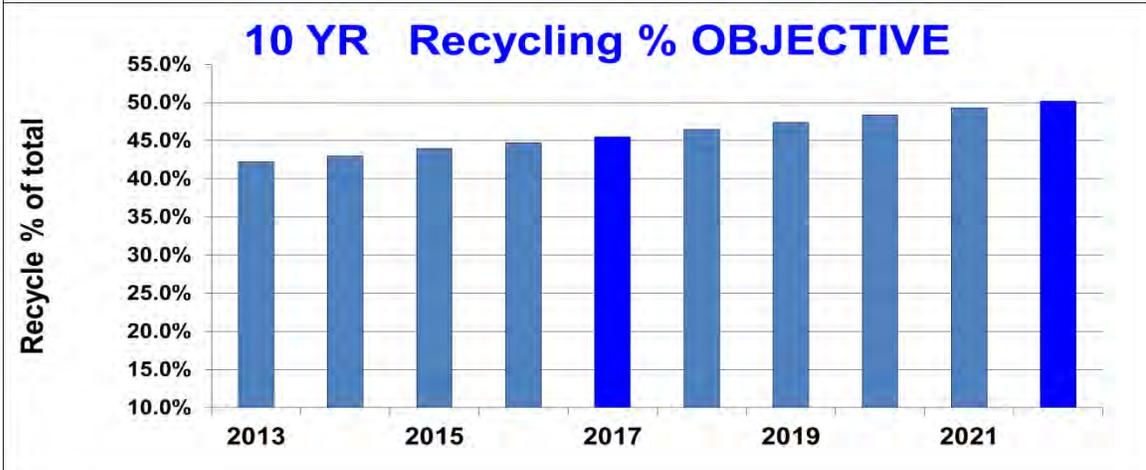
**B. LE SUEUR COUNTY GVT**

Planning Year #      2011      2013      2014      2015      2017      2022  
 Planning Yr 1      Planning Yr 2      Planning Yr 3      Planning Yr 5      Planning Yr 10

**MANAGEMENT METHOD OBJECTIVES for the County MSW Solid Waste Management System**

**Source Reduction**

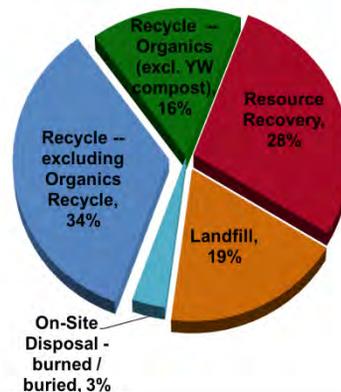
<b>Recycle</b> -- excluding Organics Recycle	28.6%	29.2%	29.7%	30.5%	31.2%	34.4%
<b>Recycle</b> -- Organics (excl. YW compost)	12.9%	13.0%	13.3%	13.5%	14.3%	15.8%
<b>Resource Recovery</b>	26.2%	26.2%	26.0%	26.7%	27.2%	28.0%
<b>Landfill</b>	27.9%	27.2%	26.7%	25.1%	23.2%	18.4%
<b>On-Site Disposal</b> - burned / buried	4.4%	4.3%	4.3%	4.2%	4.1%	3.4%



**System Objectives: Year 5**



**System Objectives: Year 10**



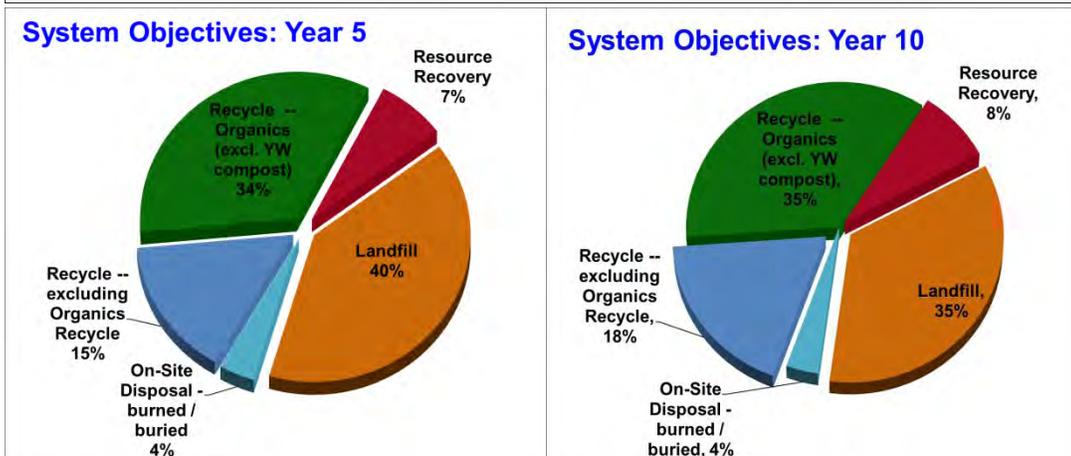
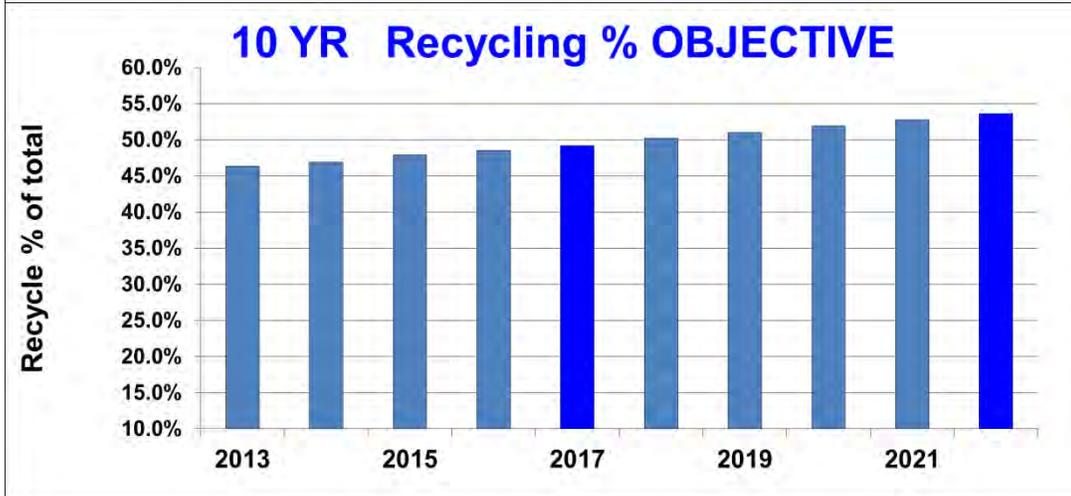
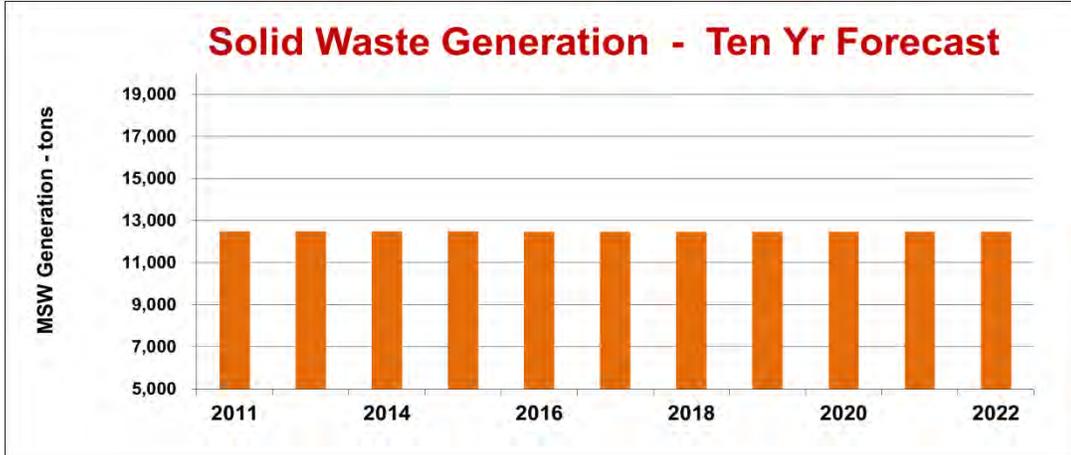
	2011	2014	2015	2016	2018	10-Year Totals	10Yr Totals
Planning Year #		Planning Yr 1	Planning Yr 2	Planning Yr 3	Planning Yr 5	Planning Yr 10	
<b>SYSTEM OBJECTIVES</b>							
Recycle -- excluding yard waste	41.4%	42.2%	43.0%	44.0%	45.5%	50.2%	
Resource Recovery	26.2%	26.2%	26.0%	26.7%	27.2%	28.0%	
Landfill	27.9%	27.2%	26.7%	25.1%	23.2%	18.4%	
On-Site Disposal - burned / buried	4.4%	4.3%	4.3%	4.2%	4.1%	3.4%	
<b>Recycling % Detail</b>							
Residential recycling %	4.0%	4.3%	4.5%	4.9%	5.3%	7.0%	
Commercial recycling %	18.5%	18.8%	19.1%	19.5%	19.9%	21.5%	
Organics Recycling (source separated food to people & lives)	12.9%	13.0%	13.3%	13.5%	14.3%	15.8%	
Mechanical /Hand Sorted @ Res Rec Fac.	1.1%	1.1%	1.1%	1.1%	1.2%	1.2%	
Banned Problem Materials + Other recycle	5.0%	5.0%	5.0%	4.9%	4.8%	4.7%	
Percent of Total MSW	41.4%	42.2%	43.0%	44.0%	45.5%	50.2%	
<b>Total MSW Generated</b>	<b>24,000</b>	<b>24,000</b>	<b>24,000</b>	<b>24,000</b>	<b>25,000</b>	<b>26,000</b>	<b>10Yr Totals 246,000</b>
<b>On-Site Disposal - bury, burn barrel, open burn -- tons</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>900</b>	<b>9,675</b>
<b>Recycling - tons</b>							
Residential	900	1,000	1,100	1,200	1,300	1,800	13,800 tons
Commercial/ Industrial/ Institutional - documented	4,370	4,500	4,600	4,700	4,900	5,500	49,600 tons
Organics Recycle (s. separated commercial & residential)	3,040	3,100	3,200	3,300	3,500	4,000	35,500 tons
Mechanical / Hand Sorted @ Res Rec Fac.	260	300	300	300	300	300	2,900 tons
Problem Materials - Banned + Other recycle	1,170	1,200	1,200	1,200	1,200	1,200	11,900 tons
<b>RECYCLING total tons</b>	<b>9,800</b>	<b>10,000</b>	<b>10,300</b>	<b>10,600</b>	<b>11,200</b>	<b>12,800</b>	<b>113,700 tons</b>
<b>Resource Recovery -tons tipped</b>							
Ramsey/Washington (Newport) RDF Facility - tons tipped	6,960	7,000	7,000	7,250	7,500	8,000	75,000 tons
Prairie Land Facility	-	25	25	25	35	50	400 tons
<b>Total RR Facilities MSW Tipped</b>	<b>6,960</b>	<b>7,025</b>	<b>7,025</b>	<b>7,275</b>	<b>7,535</b>	<b>8,050</b>	<b>75,000 tons</b>
<b>MSW from other Co's sent to a County Res. Rec. Facility</b>							
County	-	-	-	-	-	-	- tons
Other counties	-	-	-	-	-	-	- tons
<b>TOTAL RECEIVED AT COUNTY RR FACILITY -- tons</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>75,000</b>
<b>Landfill - MSW from within the County to LF - tons</b>	<b>6,600</b>	<b>6,500</b>	<b>6,400</b>	<b>6,100</b>	<b>5,700</b>	<b>4,700</b>	<b>55,800 tons</b>
<b>LANDFILL DISPOSAL DISTINATIONS for Le Sueur Co's MSW</b>							
Spruce Ridge	5,100	5,000	4,900	4,600	4,200	3,100	41,000 tons
Ponderosa LF(Blue Earth County)	1,500	1,400	1,500	1,500	1,500	1,700	15,300 tons
Another #2 LF	-	-	-	-	-	-	- tons
Out-of-State Landfills	-	-	-	-	-	-	- tons
-	-	-	-	-	-	-	- tons
-	-	-	-	-	-	-	- tons
<b>Total All Co's MSW to ALL LF's - tons</b>	<b>6,600</b>	<b>6,500</b>	<b>6,400</b>	<b>6,100</b>	<b>5,700</b>	<b>4,700</b>	<b>55,800 tons</b>
<b>LF Capacity USED + Cover - for ALL Co MSW -cy</b>	<b>7,300</b>	<b>7,200</b>	<b>7,100</b>	<b>6,700</b>	<b>6,300</b>	<b>5,200</b>	<b>62,000 cu yds</b>
<b>LANDFILL DISPOSAL of Solid Waste at landfills located WITHIN the COUNTY</b>							
MSW GENERATION to LF	-	-	-	-	-	-	- tons
All MSW Imported to LF in the Co. - tons	-	-	-	-	-	-	- tons
<b>TOTAL MSW to - tons</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>- tons</b>
Industrial & non-MSW Waste to MSW LF's in the Co. - tons	1,000	1,000	1,000	1,000	1,000	1,200	10,800 tons
<b>Total Solid Waste to LF within Co. - tons</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,200</b>	<b>10,800 tons</b>
<b>LF Capacity USED + cover for ALL Wastes -cu yds</b>	<b>1,300</b>	<b>1,300</b>	<b>1,300</b>	<b>1,300</b>	<b>1,300</b>	<b>1,500</b>	<b>12,000 cu yds</b>
<b>Yard Waste - received at YW sites in County</b>							
Yard Waste - received at YW sites in Co. - Cu Yds	6300	6300	6500	6500	6500	7000	cu yds



	2011	2013	2014	2015	2017	2022	10Yr Totals
<i>Planning Year #</i>			<i>Planning Yr 1</i>	<i>Planning Yr 2</i>	<i>Planning Yr 4</i>	<i>Planning Yr 10</i>	
<b>SYSTEM OBJECTIVES</b>							
<b>Recycle -- excluding yard waste</b>	50.7%	49.8%	50.8%	52.7%	55.7%	60.7%	
<b>Resource Recovery</b>	24.7%	24.7%	24.8%	24.8%	24.9%	25.8%	
<b>Landfill</b>	21.4%	22.3%	21.3%	19.5%	16.5%	11.3%	
<b>On-Site Disposal - burned / buried</b>	3.2%	3.1%	3.1%	3.0%	2.9%	2.2%	
<b>Recycling % Detail</b>							
Residential recycling %	5.9%	5.5%	6.0%	7.0%	8.5%	10.0%	
Commercial recycling %	38.0%	37.0%	37.0%	37.5%	38.0%	40.0%	
Organics Recycling (source separated food to people & lives)	0.5%	1.0%	1.5%	2.0%	3.0%	3.0%	
Mechanical /Hand Sorted @ Res Rec Fac.	1.0%	1.1%	1.1%	1.1%	1.1%	1.2%	
Banned Problem Materials + Other recycle	5.3%	5.3%	5.2%	5.1%	5.1%	4.4%	
<b>Percent of Total MSW</b>	50.7%	49.8%	50.8%	52.7%	55.7%	60.7%	
<b>Total MSW Generated</b>	<b>35,000</b>	<b>35,000</b>	<b>35,000</b>	<b>36,000</b>	<b>37,000</b>	<b>38,000</b>	<b>366,000</b>
<b>On-Site Disposal - bury, burn barrel, open burn -- tons</b>	1,100	1,100	1,100	1,100	1,000	800	9,990
<b>Recycling - tons</b>							
Residential	2,000	1,900	2,100	2,500	3,100	3,800	30,000 tons
Commercial/ Industrial/ Institutional - documented	13,140	12,900	13,100	13,400	13,900	15,200	140,300 tons
Organics Recycle (s. separated commercial & residential)	180	300	500	700	1,100	1,900	11,500 tons
Mechanical / Hand Sorted @ Res Rec Fac.	360	400	400	400	400	500	4,200 tons
Problem Materials - Banned + Other recycle	1,820	1,800	1,800	1,800	1,900	1,700	17,700 tons
<b>RECYCLING total tons</b>	17,500	17,400	18,000	18,900	20,400	23,000	203,700 tons
<b>Resource Recovery -tons tipped</b>							
Ramsey/Washington (Newport) RDF Facility - tons tipped	9,620	9,710	9,815	9,925	10,125	10,725	102,000 tons
Prairie Land Facility	-	50	100	150	200	400	2,300 tons
<b>Total RR Facilities MSW Tipped</b>	9,620	9,760	9,915	10,075	10,325	11,125	104,000 tons
<b>MSW from other Co's sent to a County Res. Rec. Facility</b>							
County	-	-	-	-	-	-	- tons
Other counties	-	-	-	-	-	-	- tons
<b>TOTAL RECEIVED AT COUNTY RR FACILITY -- tons</b>	-	-	-	-	-	-	102,000
<b>Landfill - MSW from within the County to LF - tons</b>	7,400	7,800	7,600	7,000	6,000	4,300	60,200 tons
<b>LANDFILL DISPOSAL DESTINATIONS for Nicollet Co's MSW</b>							
Spruce Ridge	3,000	2,400	2,300	2,100	1,900	1,500	19,000 tons
Ponderosa LF(Blue Earth County)	3,100	4,500	4,400	4,000	3,400	2,200	33,700 tons
Brown County Landfill	1,300	900	900	800	700	600	7,500 tons
<b>Out-of-State Landfills</b>							
--	-	-	-	-	-	-	- tons
--	-	-	-	-	-	-	- tons
--	-	-	-	-	-	-	- tons
<b>Total All Co's MSW to ALL LF's - tons</b>	7,400	7,800	7,600	7,000	6,000	4,300	60,200 tons
<b>LF Capacity USED + Cover - for ALL Co MSW -cy</b>	13,500	14,200	13,800	12,700	10,900	7,800	109,500 cu yds
<b>LANDFILL DISPOSAL of Solid Waste at landfills located WITHIN the COUNTY</b>							
MSW GENERATION to LF	-	-	-	-	-	-	- tons
All MSW Imported to LF in the Co. - tons	-	-	-	-	-	-	- tons
<b>TOTAL MSW to - tons</b>	-	-	-	-	-	-	- tons
Industrial & non-MSW Waste to MSW LF's in the Co. - tons	300	300	400	400	400	400	4,000 tons
<b>Total Solid Waste to LF within Co. - tons</b>	300	300	400	400	400	400	4,000 tons
<b>LF Capacity USED + cover for ALL Wastes -cu yds</b>	700	800	900	900	1,000	900	7,200 cu yds
<b>Yard Waste - received at YW sites in County</b>							
Yard Waste - received at YW sites in Co. - Cu Yds	10000	10000	10000	11000	12000	14000	cu yds

**D. SIBLEY COUNTY GVT**

Planning Year #	2011	2013 Planning Yr 1	2014 Planning Yr 2	2016 Planning Yr 3	2017 Planning Yr 5	2022 Planning Yr 10
<b>MANAGEMENT METHOD OBJECTIVES for the County MSW Solid Waste Management System</b>						
<b>Source Reduction</b>						
Recycle -- excluding Organics Recycle	12.4%	12.7%	13.3%	14.1%	15.2%	18.3%
Recycle -- Organics (excl. YW compost)	33.6%	33.6%	33.6%	33.8%	34.0%	35.3%
Resource Recovery	5.5%	5.7%	6.2%	6.6%	7.2%	8.1%
Landfill	44.6%	44.0%	43.0%	41.7%	39.9%	34.9%
On-Site Disposal - burned / buried	3.9%	3.9%	3.9%	3.8%	3.7%	3.4%



	2011	2013	2014	2015	2017	2022	10Yr Totals
<i>Planning Year #</i>		<i>Planning Yr 1</i>	<i>Planning Yr 2</i>	<i>Planning Yr 3</i>	<i>Planning Yr 5</i>	<i>Planning Yr 10</i>	
<b>SYSTEM OBJECTIVES</b>							
<b>Recycle -- excluding yard waste</b>	46.0%	<b>46.3%</b>	<b>46.9%</b>	<b>47.9%</b>	<b>49.2%</b>	<b>53.6%</b>	
<b>Resource Recovery</b>	5.5%	<b>5.7%</b>	<b>6.2%</b>	<b>6.6%</b>	<b>7.2%</b>	<b>8.1%</b>	
<b>Landfill</b>	44.6%	<b>44.0%</b>	<b>43.0%</b>	<b>41.7%</b>	<b>39.9%</b>	<b>34.9%</b>	
<b>On-Site Disposal - burned / buried</b>	3.9%	<b>3.9%</b>	<b>3.9%</b>	<b>3.8%</b>	<b>3.7%</b>	<b>3.4%</b>	
<b>Recycling % Detail</b>							
Residential recycling %	4.5%	4.8%	5.0%	5.3%	6.0%	7.1%	
Commercial recycling %	5.0%	5.0%	5.3%	5.7%	6.0%	8.0%	
Organics Recycling (source separated food to people & lives)	33.6%	33.6%	33.6%	33.8%	34.0%	35.3%	
Mechanical /Hand Sorted @ Res Rec Fac.	0.2%	0.2%	0.3%	0.3%	0.3%	0.4%	
Banned Problem Materials + Other recycle	2.7%	2.7%	2.7%	2.8%	2.9%	2.8%	
<b>Percent of Total MSW</b>	46.0%	<b>46.3%</b>	<b>46.9%</b>	<b>47.9%</b>	<b>49.2%</b>	<b>53.6%</b>	
<b>Total MSW Generated</b>	<b>12,000</b>	<b>12,000</b>	<b>12,000</b>	<b>12,000</b>	<b>12,000</b>	<b>12,000</b>	<b>10Yr Totals 125,000</b>
<b>On-Site Disposal - bury, burn barrel, open burn -- tons</b>	500	<b>500</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>400</b>	<b>4,512</b>
<b>Recycling - tons</b>							
Residential	600	600	600	700	700	900	7,500 tons
Commercial/ Industrial/ Institutional - documented	620	600	700	700	700	1,000	8,000 tons
<b>Organics Recycle (s. separated commercial &amp; residential)</b>	<b>4,200</b>	<b>4,200</b>	<b>4,200</b>	<b>4,200</b>	<b>4,200</b>	<b>4,400</b>	<b>42,800 tons</b>
Mechanical / Hand Sorted @ Res Rec Fac.	30	-	-	-	-	-	400 tons
<b>Problem Materials - Banned + Other recycle</b>	<b>330</b>	<b>300</b>	<b>300</b>	<b>400</b>	<b>400</b>	<b>400</b>	<b>3,600 tons</b>
<b>RECYCLING total tons</b>	<b>5,800</b>	<b>5,800</b>	<b>5,900</b>	<b>6,000</b>	<b>6,100</b>	<b>6,700</b>	<b>62,200 tons</b>
<b>Resource Recovery -tons tipped</b>							
Ramsey/Washington (Newport) RDF Facility - tons tipped	770	805	865	905	985	1,100	10,000 tons
Prairie Land Facility	-	5	15	25	30	45	300 tons
<b>Total RR Facilities MSW Tipped</b>	<b>770</b>	<b>810</b>	<b>880</b>	<b>930</b>	<b>1,015</b>	<b>1,145</b>	<b>10,000 tons</b>
<b>MSW from other Co's sent to a County Res. Rec. Facility</b>							
County	-	-	-	-	-	-	- tons
Other counties	-	-	-	-	-	-	- tons
<b>TOTAL RECEIVED AT COUNTY RR FACILITY -- tons</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10,000</b>
<b>Landfill - MSW from within the County to LF - tons</b>	<b>5,600</b>	<b>5,500</b>	<b>5,400</b>	<b>5,200</b>	<b>5,000</b>	<b>4,400</b>	<b>49,300 tons</b>
<b>LANDFILL DISPOSAL DESTINATIONS for Sibley Co's MSW</b>							
Spruce Ridge	-	-	-	-	-	-	100 tons
Another #3 LF	5,600	5,500	5,400	5,200	5,000	4,400	49,000 tons
Another #2 LF	-	-	-	-	-	-	- tons
<b>Out-of-State Landfills</b>							
--	-	-	-	-	-	-	- tons
--	-	-	-	-	-	-	- tons
--	-	-	-	-	-	-	- tons
<b>Total All Co's MSW to ALL LF's - tons</b>	<b>5,600</b>	<b>5,500</b>	<b>5,400</b>	<b>5,200</b>	<b>5,000</b>	<b>4,400</b>	<b>49,300 tons</b>
<b>LF Capacity USED + Cover - for ALL Co MSW -cy</b>	<b>7,000</b>	<b>6,900</b>	<b>6,700</b>	<b>6,500</b>	<b>6,200</b>	<b>5,400</b>	<b>61,700 cu yds</b>
<b>LANDFILL DISPOSAL of Solid Waste at landfills located WITHIN the COUNTY</b>							
MSW GENERATION to LF	-	-	-	-	-	-	100 tons
All MSW Imported to LF in the Co. - tons	-	-	-	-	-	-	- tons
<b>TOTAL MSW to - tons</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100 tons</b>
Industrial & non-MSW Waste to MSW LF's in the Co. - tons	100	100	100	100	100	100	1,100 tons
<b>Total Solid Waste to LF within Co. - tons</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>1,200 tons</b>
<b>LF Capacity USED + cover for ALL Wastes -cu yds</b>	<b>100</b>	<b>100</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>1,700 cu yds</b>
<b>Yard Waste - received at YW sites in County</b>							
Yard Waste - received at YW sites in Co. - Cu Yds	4000	4200	4200	4200	4500	4500	cu yds

## APPENDIX 2: DETAILED BUDGET OUTLINE FOR THE 10-YEAR PLAN PERIOD

### A. REGIONAL BUDGET

#### TRI COUNTY SOLID WASTE ESTIMATED SOLID WASTE BUDGET 2011-2021

		Number of households= 30,419													
		Inflation Rate= 2%													
Total MSW Tonnage Projections: (from Goal-Volume Table)		74,127													
		Base Year													
Expenditures	2011	2012	2013	2014	2015	2016	5 Year Total	2017	2018	2019	2020	2021	5 Year Total	10 Year Total	
Waste Education/Source Reduction	\$11,162	\$11,430	\$11,704	\$11,985	\$12,273	\$12,567	\$59,959	\$12,869	\$13,178	\$13,494	\$13,818	\$14,150	\$67,508	\$127,467	
Recycling:		\$0													
Capital Outlay	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Collections Operations	\$5,395	\$5,524	\$5,657	\$5,793	\$5,932	\$6,074	\$28,980	\$6,220	\$6,369	\$6,522	\$6,679	\$6,839	\$32,629	\$61,610	
Recycling Contract (Sibley & Le Sueur)	\$77,222	\$79,075	\$80,973	\$82,916	\$84,906	\$86,944	\$414,816	\$89,031	\$91,168	\$93,356	\$95,596	\$97,891	\$467,041	\$881,857	
Recycling Containers	\$1,130	\$1,157	\$1,185	\$1,213	\$1,242	\$1,272	\$6,070	\$1,303	\$1,334	\$1,366	\$1,399	\$1,432	\$6,834	\$12,904	
<b>Recycling Total</b>	<b>\$83,747</b>	<b>\$85,757</b>	<b>\$87,815</b>	<b>\$89,923</b>	<b>\$92,081</b>	<b>\$94,291</b>	<b>\$449,866</b>	<b>\$96,554</b>	<b>\$98,871</b>	<b>\$101,244</b>	<b>\$103,674</b>	<b>\$106,162</b>	<b>\$506,504</b>	<b>\$956,371</b>	
Yardwaste Management	\$1,000	\$1,024	\$1,049	\$1,074	\$1,100	\$1,126	\$5,372	\$1,153	\$1,181	\$1,209	\$1,238	\$1,268	\$6,048	\$11,420	
Household Hazardous Waste Supplies	\$1,993	\$2,041	\$2,090	\$2,140	\$2,191	\$2,244	\$10,706	\$2,298	\$2,353	\$2,409	\$2,467	\$2,526	\$12,054	\$22,760	
Household Hazardous Waste Staffing	\$28,376	\$29,057	\$29,754	\$30,468	\$31,200	\$31,949	\$152,428	\$32,715	\$33,500	\$34,304	\$35,128	\$35,971	\$171,619	\$324,047	
Hazardous Waste Collection Contractor	\$11,591	\$11,869	\$12,154	\$12,446	\$12,744	\$13,050	\$62,264	\$13,364	\$13,684	\$14,013	\$14,349	\$14,693	\$70,103	\$132,366	
Household Hazardous Waste Disposal	\$26,810	\$27,453	\$28,112	\$28,787	\$29,478	\$30,185	\$144,016	\$30,910	\$31,652	\$32,411	\$33,189	\$33,986	\$162,148	\$306,164	
Demolition Waste	\$1,000	\$1,024	\$1,049	\$1,074	\$1,100	\$1,126	\$5,372	\$1,153	\$1,181	\$1,209	\$1,238	\$1,268	\$6,048	\$11,420	
Special Wastes:															
Waste Tires	\$2,500	\$2,500	\$2,560	\$2,621	\$2,684	\$2,749	\$13,115	\$2,815	\$2,882	\$2,951	\$3,022	\$3,095	\$14,766	\$27,880	
Appliances	\$2,500	\$2,500	\$2,560	\$2,621	\$2,684	\$2,749	\$13,115	\$2,815	\$2,882	\$2,951	\$3,022	\$3,095	\$14,766	\$27,880	
Electronics	\$2,500	\$2,500	\$2,560	\$2,621	\$2,684	\$2,749	\$13,115	\$2,815	\$2,882	\$2,951	\$3,022	\$3,095	\$14,766	\$27,880	
Flourescent Lamps	\$933	\$955	\$978	\$1,002	\$1,026	\$1,050	\$5,012	\$1,076	\$1,101	\$1,128	\$1,155	\$1,183	\$5,643	\$10,655	
<b>Special Wastes Total</b>	<b>\$8,433</b>	<b>\$8,455</b>	<b>\$8,658</b>	<b>\$8,866</b>	<b>\$9,079</b>	<b>\$9,297</b>	<b>\$44,356</b>	<b>\$9,520</b>	<b>\$9,748</b>	<b>\$9,982</b>	<b>\$10,222</b>	<b>\$10,467</b>	<b>\$49,940</b>	<b>\$94,295</b>	
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Administration:															
Office Supplies	\$2,049	\$2,098	\$2,149	\$2,200	\$2,253	\$2,307	\$11,007	\$2,362	\$2,419	\$2,477	\$2,537	\$2,597	\$12,392	\$23,399	
Salaries	\$55,515	\$56,847	\$58,212	\$59,609	\$61,039	\$62,504	\$298,212	\$64,004	\$65,541	\$67,114	\$68,724	\$70,374	\$335,756	\$633,968	
Printing / Brochures	\$764	\$782	\$801	\$820	\$840	\$860	\$4,104	\$881	\$902	\$924	\$946	\$968	\$4,621	\$8,725	
Phone	\$1,236	\$1,266	\$1,296	\$1,327	\$1,359	\$1,392	\$6,639	\$1,425	\$1,459	\$1,494	\$1,530	\$1,567	\$7,475	\$14,115	
Legal Services	\$1,260	\$1,290	\$1,000	\$1,000	\$1,000	\$1,000	\$5,290	\$1,024	\$1,049	\$1,074	\$1,100	\$1,126	\$5,372	\$10,662	
Postage	\$559	\$572	\$600	\$600	\$600	\$600	\$2,972	\$614	\$629	\$644	\$660	\$676	\$3,223	\$6,195	
MCIT Insurance	\$3,240	\$3,318	\$3,397	\$3,479	\$3,562	\$3,648	\$17,404	\$3,735	\$3,825	\$3,917	\$4,011	\$4,107	\$19,596	\$37,000	
Mileage	\$3,615	\$3,702	\$3,600	\$3,600	\$3,700	\$3,700	\$18,302	\$3,789	\$3,880	\$3,973	\$4,068	\$4,166	\$19,875	\$38,177	
Fiscal Agent Fee	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$20,000	\$4,096	\$4,194	\$4,295	\$4,398	\$4,504	\$21,487	\$41,487	
Educational Supplies	\$499	\$600	\$600	\$600	\$600	\$600	\$3,000	\$614	\$629	\$644	\$660	\$676	\$3,223	\$6,223	
Fair Booth Rent (3 Counties)	\$305	\$312	\$320	\$327	\$335	\$343	\$1,638	\$352	\$360	\$369	\$378	\$387	\$1,845	\$3,483	
P.O. Box Rent	\$100	\$100	\$100	\$100	\$100	\$100	\$500	\$102	\$105	\$107	\$110	\$113	\$537	\$1,037	
Office Rent	\$3,300	\$3,300	\$3,300	\$3,300	\$3,300	\$3,300	\$16,500	\$3,379	\$3,460	\$3,543	\$3,628	\$3,715	\$17,727	\$34,227	
Meals	\$241	\$247	\$300	\$300	\$350	\$350	\$1,547	\$358	\$367	\$376	\$385	\$394	\$1,880	\$3,427	
Advertising	\$14,980	\$15,340	\$15,708	\$16,085	\$16,471	\$16,866	\$80,469	\$17,271	\$17,685	\$18,110	\$18,544	\$18,989	\$90,599	\$171,068	
Training	\$300	\$300	\$307	\$315	\$322	\$330	\$1,574	\$338	\$346	\$354	\$363	\$371	\$1,772	\$3,346	
<b>Administration Total</b>	<b>\$91,963</b>	<b>\$94,074</b>	<b>\$95,689</b>	<b>\$97,662</b>	<b>\$99,832</b>	<b>\$101,900</b>	<b>\$489,158</b>	<b>\$104,346</b>	<b>\$106,850</b>	<b>\$109,415</b>	<b>\$112,041</b>	<b>\$114,729</b>	<b>\$547,381</b>	<b>\$1,036,538</b>	
SCORE Planning, Oversight & Adm.	\$4,897	\$5,015	\$5,135	\$5,258	\$5,384	\$5,514	\$26,305	\$5,646	\$5,781	\$5,920	\$6,062	\$6,208	\$29,617	\$55,923	
HHW and problem materials management	\$6,000	\$6,144	\$6,291	\$6,442	\$6,597	\$6,755	\$32,230	\$6,918	\$7,084	\$7,254	\$7,428	\$7,606	\$36,288	\$68,519	
<b>Total Program Cost:</b>	<b>\$276,972</b>	<b>\$283,344</b>	<b>\$289,501</b>	<b>\$296,125</b>	<b>\$303,058</b>	<b>\$310,004</b>	<b>\$1,482,032</b>	<b>\$317,444</b>	<b>\$325,063</b>	<b>\$332,864</b>	<b>\$340,853</b>	<b>\$349,033</b>	<b>\$1,665,257</b>	<b>\$3,147,289</b>	
Gross cost per HH per year:	\$9.11	\$9.31	\$9.52	\$9.73	\$9.96	\$10.19	\$48.72	\$10.44	\$10.69	\$10.94	\$11.21	\$11.47	\$54.74	\$103.46	
Gross cost per ton MSW generated	\$3.74	\$3.82	\$3.91	\$3.99	\$4.09	\$4.18	\$19.99	\$4.28	\$4.39	\$4.49	\$4.60	\$4.71	\$22.46	\$42.46	
<b>Revenues</b>															
SCORE Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
HHW Grant	\$10,458	\$10,709	\$10,966	\$11,229	\$11,499	\$11,775	\$56,178	\$12,057	\$12,347	\$12,643	\$12,946	\$13,257	\$63,250	\$119,428	
Le Sueur County	\$65,181	\$66,745	\$68,347	\$69,988	\$71,667	\$73,387	\$350,135	\$75,149	\$76,952	\$78,799	\$80,690	\$82,627	\$394,217	\$744,351	
Nicollet County	\$69,571	\$71,241	\$72,950	\$74,701	\$76,494	\$78,330	\$373,717	\$80,210	\$82,135	\$84,106	\$86,125	\$88,192	\$420,767	\$794,484	
Sibley County	\$53,488	\$54,772	\$56,086	\$57,432	\$58,811	\$60,222	\$287,323	\$61,667	\$63,147	\$64,663	\$66,215	\$67,804	\$323,497	\$610,880	
Recycling Rebate Material Sales	\$83,534	\$85,539	\$87,592	\$89,694	\$91,847	\$94,051	\$448,722	\$96,308	\$98,620	\$100,986	\$103,410	\$105,892	\$505,216	\$953,938	
Dept. of Ag. & MCIT Rebate	\$4,252	\$4,354	\$4,459	\$4,566	\$4,675	\$4,787	\$22,841	\$4,902	\$5,038	\$5,179	\$5,325	\$5,475	\$25,113	\$101,879	
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Interest Allocations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Total Program Revenues</b>	<b>\$286,484</b>	<b>\$293,360</b>	<b>\$300,400</b>	<b>\$307,610</b>	<b>\$314,992</b>	<b>\$322,552</b>	<b>\$1,538,915</b>	<b>\$330,294</b>	<b>\$336,590</b>	<b>\$343,148</b>	<b>\$349,911</b>	<b>\$356,885</b>	<b>\$1,808,827</b>	<b>\$3,347,741</b>	
<b>Net Budget*</b>	<b>\$9,512</b>	<b>\$10,016</b>	<b>\$10,899</b>	<b>\$11,485</b>	<b>\$11,934</b>	<b>\$12,548</b>	<b>\$56,883</b>	<b>\$12,850</b>	<b>\$13,527</b>	<b>\$14,283</b>	<b>\$15,058</b>	<b>\$15,852</b>	<b>\$143,570</b>	<b>\$200,452</b>	

**B. LE SUEUR COUNTY BUDGET**

**LE SUEUR COUNTY ESTIMATED SOLID WASTE BUDGET 2011-2021**

		Number of households=		10,907											
		Inflation Rate=		2%											
Total MSW Tonnage Projections: (from Goal-Volume Table)		24,778													
		Base Year													
<b>Expenditures</b>	2011	2012	2013	2014	2015	2016	5 Year Total	2017	2018	2019	2020	2021	5 Year Total	10 Year Total	
Waste Education/Source Reduction	\$2,758	\$2,824	\$2,892	\$2,961	\$3,032	\$3,105	\$14,815	\$3,180	\$3,256	\$3,334	\$3,414	\$3,496	\$16,680	\$31,496	
Recycling:															
Message in the Bottle Program	\$800	\$819	\$839	\$859	\$880	\$901	\$4,297	\$922	\$944	\$967	\$990	\$1,014	\$4,838	\$9,136	
City Recycling Operations	\$23,400	\$23,962	\$24,537	\$25,126	\$25,729	\$26,346	\$125,698	\$26,978	\$27,626	\$28,289	\$28,968	\$29,663	\$141,524	\$267,222	
County Rural Recycling Contract	\$43,379	\$44,420	\$45,486	\$46,578	\$47,696	\$48,840	\$233,020	\$50,013	\$51,213	\$52,442	\$53,701	\$54,989	\$262,357	\$495,378	
<b>Recycling Total</b>	<b>\$67,579</b>	<b>\$69,201</b>	<b>\$70,862</b>	<b>\$72,562</b>	<b>\$74,304</b>	<b>\$76,087</b>	<b>\$363,016</b>	<b>\$77,913</b>	<b>\$79,783</b>	<b>\$81,698</b>	<b>\$83,659</b>	<b>\$85,667</b>	<b>\$408,720</b>	<b>\$771,736</b>	
City Yardwaste Management Operations	\$500	\$512	\$524	\$537	\$550	\$563	\$2,686	\$576	\$590	\$604	\$619	\$634	\$3,024	\$5,710	
Household Hazardous Waste Admin	\$6,247	\$6,397	\$6,550	\$6,708	\$6,869	\$7,033	\$33,557	\$7,202	\$7,375	\$7,552	\$7,733	\$7,919	\$37,782	\$71,339	
Demolition Waste	\$500	\$500	\$512	\$524	\$537	\$550	\$2,623	\$563	\$576	\$590	\$604	\$619	\$2,953	\$5,576	
Special Wastes:															
Waste Tires	\$18,328	\$18,768	\$19,218	\$19,680	\$20,152	\$20,635	\$98,453	\$21,131	\$21,638	\$22,157	\$22,689	\$23,234	\$110,848	\$209,301	
Appliances	\$5,091	\$5,213	\$5,338	\$5,466	\$5,598	\$5,732	\$27,347	\$5,870	\$6,010	\$6,155	\$6,302	\$6,454	\$30,791	\$58,138	
Used Oil/Filters/Batteries	\$579	\$593	\$607	\$622	\$637	\$652	\$3,110	\$668	\$684	\$700	\$717	\$734	\$3,502	\$6,612	
Electronics	\$8,856	\$9,069	\$9,286	\$9,509	\$9,737	\$9,971	\$47,572	\$10,210	\$10,455	\$10,706	\$10,963	\$11,226	\$53,561	\$101,133	
Flourescent Lamps	\$942	\$965	\$988	\$1,011	\$1,036	\$1,061	\$5,060	\$1,086	\$1,112	\$1,139	\$1,166	\$1,194	\$5,697	\$10,575	
<b>Special Wastes Total</b>	<b>\$33,796</b>	<b>\$34,607</b>	<b>\$35,438</b>	<b>\$36,288</b>	<b>\$37,159</b>	<b>\$38,051</b>	<b>\$181,543</b>	<b>\$38,964</b>	<b>\$39,899</b>	<b>\$40,857</b>	<b>\$41,837</b>	<b>\$42,842</b>	<b>\$204,399</b>	<b>\$385,942</b>	
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Administration:															
Tri County Admin. Services	\$65,181	\$66,745	\$68,347	\$69,988	\$71,667	\$73,387	\$350,135	\$75,149	\$76,952	\$78,799	\$80,690	\$82,627	\$394,217	\$744,351	
Le Sueur Fiscal Agent Fee	\$27,099	\$27,749	\$28,415	\$29,097	\$29,796	\$30,511	\$145,568	\$31,243	\$31,993	\$32,761	\$33,547	\$34,352	\$163,896	\$309,464	
Salaries	\$31,252	\$32,002	\$32,770	\$33,557	\$34,362	\$35,187	\$167,877	\$36,031	\$36,896	\$37,781	\$38,688	\$39,617	\$189,013	\$356,890	
<b>Administration Total</b>	<b>\$123,532</b>	<b>\$126,497</b>	<b>\$129,533</b>	<b>\$132,641</b>	<b>\$135,825</b>	<b>\$139,085</b>	<b>\$663,580</b>	<b>\$142,423</b>	<b>\$145,841</b>	<b>\$149,341</b>	<b>\$152,925</b>	<b>\$156,595</b>	<b>\$747,125</b>	<b>\$1,410,706</b>	
SCORE Planning, Oversight & Adm.	\$4,021	\$4,118	\$4,216	\$4,318	\$4,421	\$4,527	\$21,600	\$4,636	\$4,747	\$4,861	\$4,978	\$5,097	\$24,319	\$45,919	
HHW and problem materials management	\$17,789	\$18,216	\$18,653	\$19,101	\$19,559	\$20,029	\$95,558	\$20,509	\$21,002	\$21,506	\$22,022	\$22,550	\$107,588	\$203,146	
<b>Total Program Cost:</b>	<b>\$256,722</b>	<b>\$262,871</b>	<b>\$269,180</b>	<b>\$275,641</b>	<b>\$282,256</b>	<b>\$289,030</b>	<b>\$1,378,978</b>	<b>\$295,967</b>	<b>\$303,070</b>	<b>\$310,344</b>	<b>\$317,792</b>	<b>\$325,419</b>	<b>\$1,552,591</b>	<b>\$2,931,570</b>	
Gross cost per HH per year:	\$23.54	\$24.10	\$24.68	\$25.27	\$25.88	\$26.50	\$126.43	\$27.14	\$27.79	\$28.45	\$29.14	\$29.84	\$142.35	\$268.78	
Gross cost per ton MSW generated	\$10.36	\$10.61	\$10.86	\$11.12	\$11.39	\$11.66	\$55.65	\$11.94	\$12.23	\$12.52	\$12.83	\$13.13	\$62.66	\$118.31	
<b>Revenues</b>															
SCORE Grant	\$68,722	\$68,722	\$68,722	\$68,722	\$68,722	\$68,722	\$343,610	\$68,722	\$68,722	\$68,722	\$68,722	\$68,722	\$343,610	\$687,220	
HHW Grant	\$2,978	\$3,049	\$3,123	\$3,198	\$3,274	\$3,353	\$15,997	\$3,433	\$3,516	\$3,600	\$3,687	\$3,775	\$18,011	\$34,008	
Special Assessment Tax	\$116,689	\$119,490	\$122,357	\$125,294	\$128,301	\$131,380	\$626,822	\$134,533	\$137,762	\$141,068	\$144,454	\$147,921	\$705,739	\$1,332,560	
Misc Rebates	\$167	\$171	\$175	\$179	\$184	\$188	\$897	\$193	\$197	\$202	\$207	\$212	\$1,010	\$1,907	
Hauler License Fee	\$3,255	\$3,333	\$3,413	\$3,495	\$3,579	\$3,665	\$17,485	\$3,753	\$3,843	\$3,935	\$4,029	\$4,126	\$19,686	\$37,171	
Special Collection Fees	\$18,837	\$19,289	\$19,752	\$20,226	\$20,712	\$21,209	\$101,187	\$21,718	\$22,239	\$22,773	\$23,319	\$23,879	\$113,927	\$215,114	
Recycling Material Sales	\$46,925	\$48,051	\$49,204	\$50,385	\$51,595	\$52,833	\$252,068	\$54,101	\$55,399	\$56,729	\$58,090	\$59,485	\$283,804	\$535,872	
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Total Program Revenues</b>	<b>\$257,573</b>	<b>\$262,105</b>	<b>\$266,747</b>	<b>\$271,499</b>	<b>\$276,366</b>	<b>\$281,349</b>	<b>\$1,358,066</b>	<b>\$286,452</b>	<b>\$291,678</b>	<b>\$297,029</b>	<b>\$302,508</b>	<b>\$308,119</b>	<b>\$1,485,786</b>	<b>\$2,843,853</b>	
<b>Net Budget*</b>	<b>\$851</b>	<b>(\$766)</b>	<b>(\$2,434)</b>	<b>(\$4,141)</b>	<b>(\$5,890)</b>	<b>(\$7,681)</b>	<b>(\$20,912)</b>	<b>(\$9,514)</b>	<b>(\$11,392)</b>	<b>(\$13,315)</b>	<b>(\$15,284)</b>	<b>(\$17,300)</b>	<b>(\$66,805)</b>	<b>(\$87,717)</b>	

**C. NICOLLET COUNTY BDUGET**

		Number of households=		13,375											
		Inflation Rate=		2%								5 Year Total		10 Year Total	
Total MSW Tonnage Projections: (from Goal-Volume Table)		36,155													
		Base Year													
<b>Expenditures</b>	2011	2012	2013	2014	2015	2016	5 Year Total	2017	2018	2019	2020	2021	5 Year Total	10 Year Total	
Waste Education/Source Reduction	\$4,264	\$4,366	\$4,471	\$4,578	\$4,688	\$4,801	\$22,905	\$4,916	\$5,034	\$5,155	\$5,279	\$5,405	\$25,789	\$48,694	
Recycling:															
Riverbend Recycling Capital Outlay	\$64,000	\$65,536	\$67,109	\$68,719	\$70,369	\$72,058	\$343,791	\$73,787	\$75,558	\$77,371	\$79,228	\$81,130	\$387,074	\$730,865	
Riverbend Recycling Operations	\$89,232	\$91,374	\$93,567	\$95,812	\$98,112	\$100,466	\$479,330	\$102,877	\$105,347	\$107,875	\$110,464	\$113,115	\$539,678	\$1,019,008	
County Rural Recycling Contract	\$38,847	\$39,779	\$40,734	\$41,712	\$42,713	\$43,738	\$208,676	\$44,788	\$45,862	\$46,963	\$48,090	\$49,244	\$234,948	\$443,623	
Other Recycling service & supplies	\$3,034	\$3,107	\$3,181	\$3,258	\$3,336	\$3,416	\$16,298	\$3,498	\$3,582	\$3,668	\$3,756	\$3,846	\$18,350	\$34,648	
<b>Recycling Total</b>	<b>\$195,113</b>	<b>\$199,796</b>	<b>\$204,591</b>	<b>\$209,501</b>	<b>\$214,529</b>	<b>\$219,678</b>	<b>\$1,048,094</b>	<b>\$224,950</b>	<b>\$230,349</b>	<b>\$235,877</b>	<b>\$241,538</b>	<b>\$247,335</b>	<b>\$1,180,049</b>	<b>\$2,228,143</b>	
Yardw aste Management	\$500	\$512	\$524	\$537	\$550	\$563	\$2,686	\$576	\$590	\$604	\$619	\$634	\$3,024	\$5,710	
Household Hazardous Waste Admin	\$6,785	\$6,948	\$7,115	\$7,285	\$7,460	\$7,639	\$36,447	\$7,823	\$8,010	\$8,203	\$8,399	\$8,601	\$41,036	\$77,483	
Demolition Waste	\$500	\$500	\$512	\$524	\$537	\$550	\$2,623	\$563	\$576	\$590	\$604	\$619	\$2,953	\$5,576	
Special Wastes:															
Waste Tires	\$9,134	\$9,353	\$9,578	\$9,808	\$10,043	\$10,284	\$49,065	\$10,531	\$10,784	\$11,042	\$11,307	\$11,579	\$55,243	\$104,308	
Appliances	\$4,087	\$4,185	\$4,286	\$4,388	\$4,494	\$4,602	\$21,954	\$4,712	\$4,825	\$4,941	\$5,059	\$5,181	\$24,718	\$46,673	
Used Oil/Filters/Batteries	\$873	\$894	\$915	\$937	\$960	\$983	\$4,690	\$1,007	\$1,031	\$1,055	\$1,081	\$1,107	\$5,280	\$9,969	
Electronics	\$5,338	\$5,466	\$5,597	\$5,732	\$5,869	\$6,010	\$28,674	\$6,154	\$6,302	\$6,453	\$6,608	\$6,767	\$32,284	\$60,959	
Flourescent Lamps	\$847	\$867	\$888	\$909	\$931	\$954	\$4,550	\$977	\$1,000	\$1,024	\$1,049	\$1,074	\$5,123	\$9,673	
<b>Special Wastes Total</b>	<b>\$20,279</b>	<b>\$20,766</b>	<b>\$21,264</b>	<b>\$21,774</b>	<b>\$22,297</b>	<b>\$22,832</b>	<b>\$108,933</b>	<b>\$23,380</b>	<b>\$23,941</b>	<b>\$24,516</b>	<b>\$25,104</b>	<b>\$25,707</b>	<b>\$122,648</b>	<b>\$231,581</b>	
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Administration:															
Tri County Admin. Services	\$69,571	\$71,241	\$72,950	\$74,701	\$76,494	\$78,330	\$373,717	\$80,210	\$82,135	\$84,106	\$86,125	\$88,192	\$420,767	\$794,484	
Fiscal Agent Fee	\$25,000	\$25,600	\$26,214	\$26,844	\$27,488	\$28,147	\$134,293	\$28,823	\$29,515	\$30,223	\$30,949	\$31,691	\$151,201	\$285,494	
Mileage	\$277	\$284	\$290	\$297	\$305	\$312	\$1,488	\$319	\$327	\$335	\$343	\$351	\$1,675	\$3,163	
<b>Administration Total</b>	<b>\$94,848</b>	<b>\$97,124</b>	<b>\$99,455</b>	<b>\$101,842</b>	<b>\$104,286</b>	<b>\$106,789</b>	<b>\$509,498</b>	<b>\$109,352</b>	<b>\$111,977</b>	<b>\$114,664</b>	<b>\$117,416</b>	<b>\$120,234</b>	<b>\$573,644</b>	<b>\$1,083,141</b>	
SCORE Planning, Oversight & Adm.	\$4,870	\$4,987	\$5,107	\$5,229	\$5,355	\$5,483	\$26,160	\$5,615	\$5,749	\$5,887	\$6,029	\$6,173	\$29,454	\$55,614	
HHW and problem materials management	\$22,260	\$22,794	\$23,341	\$23,901	\$24,475	\$25,063	\$119,575	\$25,664	\$26,280	\$26,911	\$27,557	\$28,218	\$134,629	\$254,204	
<b>Total Program Cost:</b>	<b>\$349,419</b>	<b>\$357,793</b>	<b>\$366,380</b>	<b>\$375,173</b>	<b>\$384,177</b>	<b>\$393,398</b>	<b>\$1,876,921</b>	<b>\$402,839</b>	<b>\$412,507</b>	<b>\$422,407</b>	<b>\$432,545</b>	<b>\$442,926</b>	<b>\$2,113,226</b>	<b>\$3,990,147</b>	
Gross cost per HH per year:	\$26.12	\$26.75	\$27.39	\$28.05	\$28.72	\$29.41	\$140.33	\$30.12	\$30.84	\$31.58	\$32.34	\$33.12	\$158.00	\$298.33	
Gross cost per ton MSW generated	\$9.66	\$9.90	\$10.13	\$10.38	\$10.63	\$10.88	\$51.91	\$11.14	\$11.41	\$11.68	\$11.96	\$12.25	\$58.45	\$110.36	
<b>Revenues</b>															
SCORE Grant	\$79,947	\$79,947	\$79,947	\$79,947	\$79,947	\$79,947	\$399,735	\$79,947	\$79,947	\$79,947	\$79,947	\$79,947	\$399,735	\$799,470	
HHW Grant	\$5,340	\$5,468	\$5,599	\$5,734	\$5,871	\$6,012	\$28,685	\$6,157	\$6,304	\$6,456	\$6,611	\$6,769	\$32,296	\$60,982	
Special Assessment Tax	\$288,503	\$295,427	\$302,517	\$309,778	\$317,212	\$324,826	\$1,549,760	\$332,621	\$340,604	\$348,779	\$357,149	\$365,721	\$1,744,875	\$3,294,635	
Misc Rebates	\$554	\$567	\$581	\$595	\$609	\$624	\$2,976	\$639	\$654	\$670	\$686	\$702	\$3,351	\$6,327	
Hauler License Fee	\$500	\$512	\$524	\$537	\$550	\$563	\$2,686	\$576	\$590	\$604	\$619	\$634	\$3,024	\$5,710	
Special Collections Fees	\$9,152	\$9,372	\$9,597	\$9,827	\$10,063	\$10,304	\$49,162	\$10,552	\$10,805	\$11,064	\$11,330	\$11,602	\$55,352	\$104,514	
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Interest Allocations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Total Program Revenues</b>	<b>\$383,996</b>	<b>\$391,293</b>	<b>\$398,765</b>	<b>\$406,417</b>	<b>\$414,252</b>	<b>\$422,276</b>	<b>\$2,033,004</b>	<b>\$430,492</b>	<b>\$438,905</b>	<b>\$447,520</b>	<b>\$456,341</b>	<b>\$465,375</b>	<b>\$2,238,632</b>	<b>\$4,271,636</b>	
<b>Net Budget*</b>	<b>\$34,577</b>	<b>\$33,500</b>	<b>\$32,385</b>	<b>\$31,244</b>	<b>\$30,075</b>	<b>\$28,878</b>	<b>\$156,083</b>	<b>\$27,652</b>	<b>\$26,397</b>	<b>\$25,112</b>	<b>\$23,796</b>	<b>\$22,449</b>	<b>\$125,407</b>	<b>\$281,489</b>	

**D. SIBLEY COUNTY BUDGET**

**SIBLEY COUNTY ESTIMATED SOLID WASTE BUDGET 2011-2021**

		Number of households= 6,137												5 Year Total	5 Year Total	10 Year Total
		Inflation Rate= 2%														
Total MSW Tonnage Projections: (from Goal-Volume Table)		13,194												-	-	-
		Base Year														
<b>Expenditures</b>	2011	2012	2013	2014	2015	2016	5 Year Total	2017	2018	2019	2020	2021	5 Year Total	10 Year Total		
Waste Education/Source Reduction	\$3,541	\$3,626	\$3,713	\$3,802	\$3,893	\$3,987	\$19,021	\$4,082	\$4,180	\$4,281	\$4,384	\$4,489	\$21,416	\$40,437		
<b>Recycling:</b>																
Message in the Bottle Program	\$1,100	\$1,126	\$1,153	\$1,181	\$1,209	\$1,238	\$5,909	\$1,268	\$1,299	\$1,330	\$1,362	\$1,394	\$6,653	\$12,562		
Cities Recycling Operations	\$28,430	\$29,112	\$29,811	\$30,526	\$31,259	\$32,009	\$152,718	\$32,778	\$33,564	\$34,370	\$35,195	\$36,039	\$171,945	\$324,664		
County Rural Recycling Contract	\$35,842	\$36,702	\$37,583	\$38,485	\$39,409	\$40,355	\$192,534	\$41,323	\$42,315	\$43,330	\$44,370	\$45,435	\$216,773	\$409,307		
Other Recycling service & supplies	\$3,034	\$3,107	\$3,181	\$3,258	\$3,336	\$3,416	\$16,298	\$3,498	\$3,582	\$3,668	\$3,756	\$3,846	\$18,350	\$34,648		
<b>Recycling Total</b>	<b>\$68,406</b>	<b>\$70,048</b>	<b>\$71,729</b>	<b>\$73,450</b>	<b>\$75,213</b>	<b>\$77,018</b>	<b>\$367,459</b>	<b>\$78,867</b>	<b>\$80,760</b>	<b>\$82,698</b>	<b>\$84,683</b>	<b>\$86,715</b>	<b>\$413,722</b>	<b>\$781,180</b>		
City Yardwaste Management Operations	\$14,000	\$14,336	\$14,680	\$15,032	\$15,393	\$15,763	\$75,204	\$16,141	\$16,528	\$16,925	\$17,331	\$17,747	\$84,672	\$159,877		
Household Hazardous Waste Admin	\$4,531	\$4,640	\$4,751	\$4,865	\$4,982	\$5,101	\$24,339	\$5,224	\$5,349	\$5,478	\$5,609	\$5,744	\$27,404	\$51,743		
Demolition Waste	\$500	\$500	\$512	\$524	\$537	\$550	\$2,623	\$563	\$576	\$590	\$604	\$619	\$2,953	\$5,576		
<b>Special Wastes:</b>																
Waste Tires	\$13,867	\$14,200	\$14,541	\$14,890	\$15,247	\$15,613	\$74,490	\$15,988	\$16,371	\$16,764	\$17,167	\$17,579	\$83,868	\$158,358		
Ag Bag Disposal	\$3,219	\$3,296	\$3,375	\$3,456	\$3,539	\$3,624	\$17,292	\$3,711	\$3,800	\$3,892	\$3,985	\$4,081	\$19,469	\$36,760		
Appliances	\$5,112	\$5,235	\$5,360	\$5,489	\$5,621	\$5,756	\$27,460	\$5,894	\$6,035	\$6,180	\$6,328	\$6,480	\$30,918	\$58,378		
Used Oil/Filters/Batteries	\$278	\$285	\$292	\$299	\$306	\$313	\$1,493	\$321	\$328	\$336	\$344	\$352	\$1,681	\$3,175		
Electronics	\$6,012	\$6,156	\$6,304	\$6,455	\$6,610	\$6,769	\$32,295	\$6,931	\$7,098	\$7,268	\$7,442	\$7,621	\$36,361	\$68,656		
Flourescent Lamps	\$1,187	\$1,215	\$1,245	\$1,275	\$1,305	\$1,336	\$6,376	\$1,369	\$1,401	\$1,435	\$1,469	\$1,505	\$7,179	\$13,555		
<b>Special Wastes Total</b>	<b>\$29,675</b>	<b>\$30,387</b>	<b>\$31,116</b>	<b>\$31,863</b>	<b>\$32,628</b>	<b>\$33,411</b>	<b>\$159,406</b>	<b>\$34,213</b>	<b>\$35,034</b>	<b>\$35,875</b>	<b>\$36,736</b>	<b>\$37,618</b>	<b>\$179,475</b>	<b>\$338,881</b>		
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
<b>Administration:</b>																
Tri County Admin. Services	\$53,488	\$54,772	\$56,086	\$57,432	\$58,811	\$60,222	\$287,323	\$61,667	\$63,147	\$64,663	\$66,215	\$67,804	\$323,497	\$610,820		
Salaries	\$12,760	\$13,066	\$13,380	\$13,701	\$14,030	\$14,366	\$68,543	\$14,711	\$15,064	\$15,426	\$15,796	\$16,175	\$77,173	\$145,716		
Phones, Rentals & Service Contracts	\$2,011	\$2,059	\$2,109	\$2,159	\$2,211	\$2,264	\$10,803	\$2,319	\$2,374	\$2,431	\$2,489	\$2,549	\$12,163	\$22,965		
<b>Administration Total</b>	<b>\$68,259</b>	<b>\$69,897</b>	<b>\$71,575</b>	<b>\$73,293</b>	<b>\$75,052</b>	<b>\$76,853</b>	<b>\$366,669</b>	<b>\$78,697</b>	<b>\$80,586</b>	<b>\$82,520</b>	<b>\$84,501</b>	<b>\$86,529</b>	<b>\$412,832</b>	<b>\$779,501</b>		
SCORE Planning, Oversight & Adm.	\$3,870	\$3,963	\$4,058	\$4,155	\$4,255	\$4,357	\$20,789	\$4,462	\$4,569	\$4,679	\$4,791	\$4,906	\$23,406	\$44,194		
HHW and problem materials management	\$16,511	\$16,907	\$17,313	\$17,729	\$18,154	\$18,590	\$88,693	\$19,036	\$19,493	\$19,961	\$20,440	\$20,930	\$99,859	\$188,552		
<b>Total Program Cost:</b>	<b>\$209,293</b>	<b>\$214,304</b>	<b>\$219,447</b>	<b>\$224,714</b>	<b>\$230,107</b>	<b>\$235,630</b>	<b>\$1,124,202</b>	<b>\$241,285</b>	<b>\$247,076</b>	<b>\$253,006</b>	<b>\$259,078</b>	<b>\$265,296</b>	<b>\$1,265,739</b>	<b>\$2,389,942</b>		
Gross cost per HH per year:	\$34.10	\$34.92	\$35.76	\$36.62	\$37.50	\$38.39	\$183.18	\$39.32	\$40.26	\$41.23	\$42.22	\$43.23	\$206.25	\$389.43		
Gross cost per ton MSW generated	\$15.86	\$16.24	\$16.63	\$17.03	\$17.44	\$17.86	\$85.21	\$18.29	\$18.73	\$19.18	\$19.64	\$20.11	\$95.93	\$181.14		
<b>Revenues</b>																
SCORE Grant	\$55,950	\$55,950	\$55,950	\$55,950	\$55,950	\$55,950	\$279,750	\$55,950	\$55,950	\$55,950	\$55,950	\$55,950	\$279,750	\$559,500		
HHW Grant	\$2,141	\$2,192	\$2,245	\$2,299	\$2,354	\$2,411	\$11,501	\$2,468	\$2,528	\$2,588	\$2,650	\$2,714	\$12,949	\$24,450		
Special Assessment Tax	\$136,492	\$139,768	\$143,122	\$146,557	\$150,075	\$153,676	\$733,198	\$157,365	\$161,141	\$165,009	\$168,969	\$173,024	\$825,508	\$1,558,706		
Misc Rebates	\$106	\$109	\$111	\$114	\$117	\$119	\$569	\$122	\$125	\$128	\$131	\$134	\$641	\$1,210		
Hauler License Fee	\$1,200	\$1,229	\$1,258	\$1,288	\$1,319	\$1,351	\$6,446	\$1,384	\$1,417	\$1,451	\$1,486	\$1,521	\$7,258	\$13,704		
Special Collection Fees	\$14,294	\$14,637	\$14,988	\$15,348	\$15,716	\$16,094	\$76,783	\$16,480	\$16,875	\$17,280	\$17,695	\$18,120	\$86,451	\$163,234		
Recycling Material Sales	\$36,613	\$37,492	\$38,392	\$39,313	\$40,256	\$41,223	\$196,675	\$42,212	\$43,225	\$44,262	\$45,325	\$46,412	\$221,437	\$418,112		
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
<b>Total Program Revenues</b>	<b>\$246,796</b>	<b>\$251,376</b>	<b>\$256,067</b>	<b>\$260,869</b>	<b>\$265,787</b>	<b>\$270,823</b>	<b>\$1,304,923</b>	<b>\$275,980</b>	<b>\$281,261</b>	<b>\$286,669</b>	<b>\$292,206</b>	<b>\$297,876</b>	<b>\$1,433,992</b>	<b>\$2,738,915</b>		
<b>Net Budget*</b>	<b>\$37,503</b>	<b>\$37,072</b>	<b>\$36,619</b>	<b>\$36,155</b>	<b>\$35,680</b>	<b>\$35,194</b>	<b>\$180,721</b>	<b>\$34,696</b>	<b>\$34,185</b>	<b>\$33,663</b>	<b>\$33,128</b>	<b>\$32,581</b>	<b>\$168,253</b>	<b>\$348,974</b>		

### APPENDIX 3: DEFINITION OF KEY TERMS

Term	Definition
<b>Banned Materials</b>	Wastes that are statutorily banned from disposal with MSW – yard waste, e-waste, HHW, appliances, tires, used motor oil, etc.
<b>Bulky Waste</b>	A subset of MSW; Household items and other discarded materials that, due to their dimension and weight, are typically not collected as part of the regular trash and recycling or for which there is a separate fee, such as furniture, carpeting and mattress. Excludes major appliances and e-waste.
<b>Collection</b>	The aggregation of waste from the place at which it is generated and includes all activities up to the time the waste is delivered to a waste facility. (Minn. Stat. §115A.03, Subd. 5)
<b>C &amp; D Waste</b>	Term referring to construction waste and demolition debris.
<b>Commercial</b>	As in “commercial waste” or “commercial recycling.” Refers to non-residential sources, including businesses, government facilities or operations, institutions, schools, non-profit organizations, community activities, etc. Interchangeable with “non-residential.”
<b>Commingled Recycling</b>	Placing two or more source-separated recyclable materials in the same container for recycling
<b>Composting</b>	The controlled microbial degradation of organic waste to yield a humus-like product. (Minn. Rules §7035.0300)
<b>Construction Debris</b>	Waste building materials, packaging, and rubble resulting from construction, remodeling, repair, and demolition of buildings and roads. (Minn. Stat. § 115A.03, Subd. 7)
<b>Curbside Collection</b>	Collection of waste (garbage, recyclables, yard waste, etc.) from residences at the point of generation
<b>Demolition Debris</b>	Solid waste resulting from the demolition of buildings, roads, and other man-made structures, including concrete, brick, bituminous concrete, untreated wood, masonry, glass, trees and tree trimmings, rock, plastic building parts, and other inert waste materials, but not including asbestos wastes.
<b>Designation</b>	See <i>Waste Flow Designation</i> .
<b>Disposal</b>	The discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste into or on any land or water so that the waste or any other constituent thereof may enter the environment or be emitted into the air, or discharged into any waters, including ground waters. (Minn. Stat. 115A.03, Subd. 9)

Term	Definition
<b>Electronic Waste (or “e-waste”)</b>	<p>E-waste or electronic waste includes the following items:</p> <ul style="list-style-type: none"> <li>• Cathode-ray tube or CRT - "Cathode-ray tube" or "CRT" means a vacuum tube or picture tube used to convert an electronic signal into a visual image.</li> <li>• Computer - "Computer" means an electronic, magnetic, optical, electrochemical, or other high-speed data processing device performing logical, arithmetic, or storage functions, but does not include an automated typewriter or typesetter, a portable handheld calculator or device, or other similar device.</li> <li>• Computer monitor - "Computer monitor" means an electronic device that is a cathode-ray tube or flat panel display primarily intended to display information from a central processing unit or the Internet. Computer monitor includes a laptop computer</li> </ul> <p>Covered electronic device - "Covered electronic device" means computers, peripherals, facsimile machines, DVD players, video cassette recorders, and video display devices that are sold to a household by means of retail, wholesale, or electronic commerce.</p> <ul style="list-style-type: none"> <li>• Peripheral - "Peripheral" means a keyboard, printer, or any other device sold exclusively for external use with a computer that provides input or output into or from a computer.</li> <li>• Video display device - "Video display device" means a television or computer monitor, including a laptop computer, that contains a cathode-ray tube or a flat panel screen with a screen size that is greater than nine inches measured diagonally and that is marketed by manufacturers for use by households. Video display device does not include any of the following: <ul style="list-style-type: none"> <li>(1) a video display device that is part of a motor vehicle or any component part of a motor vehicle assembled by, or for, a vehicle manufacturer or franchised dealer, including replacement parts for use in a motor vehicle;</li> <li>(2) a video display device, including a touch-screen display, that is functionally or physically part of a larger piece of equipment or is designed and intended for use in an industrial; commercial, including retail; library checkout; traffic control; kiosk; security, other than household security; border control; or medical setting, including diagnostic, monitoring, or control equipment;</li> <li>(3) a video display device that is contained within a clothes washer, clothes dryer, refrigerator, refrigerator and freezer, microwave oven, conventional oven or range, dishwasher, room air conditioner, dehumidifier, or air purifier; or</li> <li>(4) a telephone of any type unless it contains a video display area greater than nine inches measured diagonally.</li> </ul> </li> </ul>
<b>Environmentally Responsible Purchasing (procurement)</b>	<p>Intentionally choosing products or services that promote pollution prevention, waste reduction, or reuse; purchasing products that can be easily recycled; buying recycled-content products; or making other purchasing decisions that are better for the environment when compared to other, typically more traditionally purchased, products or services.</p>
<b>Flow Control</b>	<p>See <i>Waste Flow Designation</i>.</p>
<b>Generation</b>	<p>The act or process of producing waste. (Minn. Stat. §115A.03, Subd. 11)</p>

<b>Term</b>	<b>Definition</b>
<b>Generator</b>	Any person who generates waste. (Minn. Stat. §115A.03, Subd. 12)
<b>Hazardous Waste</b>	Any refuse, sludge, or other waste materials or combinations of refuse, sludge, or other waste materials or discarded materials, or a combination of refuse or discarded materials, in solid, semisolid, liquid, or contained gaseous form, which because of the quantity, concentration, or chemical, physical, or infectious characteristics may: a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitation reversible illness; or b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed. Categories of hazardous waste materials include, but are not limited to explosives, flammables, oxidizers, poisons, irritants, and corrosives. Hazardous waste does not include source, special nuclear, or by-product material as defined by The Atomic Energy Act of 1954, as amended. (Minn. Stat. §116.06, Subd. 11).
<b>Hierarchy</b>	See <i>Waste Management Hierarchy</i> .
<b>Household Hazardous Waste (HHW)</b>	Waste generated from household activity that exhibits the characteristics of or that is listed as hazardous waste under Minnesota Pollution Control Agency rules, but does not include waste from commercial activities that is generated, stored, or present in a household. (Minn. Stat. §115A.96, Subd.1)
<b>Industrial (Solid) Waste</b>	Solid waste resulting from an industrial process, manufacturing, service activity, or commercial activity that is managed as a separate waste stream. (Minn. Stat. §115A.03, Subd. 13a) It does not include wastes regulated as hazardous wastes.
<b>Infectious Waste</b>	Laboratory waste, blood, regulated body fluids, sharps, and research-animal wastes that have not been decontaminated. (Minn. Stat. § 116.76, Subd. 12)
<b>Integrated Solid Waste Management</b>	A solid waste management system in which various waste management methods are used to manage waste (e.g., waste reduction, reuse, recycling, composting, resource recovery, landfilling, etc.), depending upon the characteristics of the waste and often according to a waste management hierarchy.
<b>Joint Powers Agreement</b>	A legally binding agreement between two or more governmental entities. It is a tool for intergovernmental action on, for example, solid waste management activities.
<b>Landfill (land disposal facility)</b>	A waste facility permitted by the Minnesota Pollution Control Agency that is designed or operated for disposing of waste on or in the land. (Defined as “disposal facility” in Minn. Stat. § 115A.03, Subd. 10)
<b>Landfill Abatement</b>	Actions that avoid landfilling of waste, such as waste reduction, recycling, or resource recovery.
<b>Landfill Surcharge</b>	A surcharge applied to waste tipped at landfills; can include State, county, and local surcharges.
<b>Leachate</b>	Liquid that has percolated through solid waste and has extracted, dissolved, or suspended materials from it. (Minn. Rules §7035.0330, Subd. 56)

Term	Definition
<b>Major Appliances</b>	Also commonly referred to as “white goods.” Includes items banned by State law from disposal with solid waste (clothes washers and dryers, dishwashers, hot water heaters, heat pumps, furnaces, garbage disposals, trash compactors, conventional and microwave ovens, ranges and stoves, air conditioners, dehumidifiers, refrigerators and freezers). (Minn. Stat. §115A.03, Subd. 17a)
<b>Materials Recovery Facility</b>	Facility designed for centralized sorting, processing, and/or grading of collected recyclable materials for marketing.
<b>Medical Waste</b>	Commonly used term referring to infectious waste from medical facilities or procedures.
<b>Minnesota Pollution Control Agency</b>	State agency responsible for overall environmental quality of the state, primarily through enforcement of State rules, issuing of permits, and education for compliance. The Governor appoints commissioner.
<b>Mixed Municipal Solid Waste (MSW)</b>	Garbage, refuse, and other solid waste from residential, commercial, industrial, and community activities that the generator of the waste aggregates for collection, but does not include auto hulks, street sweepings, ash, construction debris, mining waste, sludges, tree and agricultural wastes, tires, lead acid batteries, used oil, and other materials collected, processed, and disposed of as separate waste streams. (Minn. Stat. §115A.03 Subd. 21)
<b>Multi-family</b>	Multi-family (or “multi-unit”) residential dwellings are considered residences, not commercial establishments, for purposes of this plan.
<b>Multi-unit</b>	Multi-unit (or “multi-family”) residential dwellings are considered residences, not commercial establishments, for purposes of this plan.
<b>Non-MSW</b>	Solid waste that is not managed as part of the MSW stream. Typically thought of as those items specifically excluded from MSW in the statutory definition of MSW, as well as other wastes such as non-hazardous industrial waste, C&D waste, infectious waste, and other separately managed solid waste streams.
<b>Non-processible Waste</b>	Waste brought to a resource recovery facility but which cannot be mechanically processed due to its physical characteristics or potential harmful effects.
<b>Non-putrescible Waste</b>	Solid wastes which are not capable of being decomposed by micro-organisms with sufficient rapidity as to cause odors, gases, attraction of vectors or other offensive conditions. (By contrast, putrescible wastes are a subset of organic wastes that tend to biodegrade very rapidly, such as food scraps.)
<b>Non-residential</b>	Refers to places other than where people live, such as businesses, government facilities or operations, institutions, schools, non-profit organizations, community activities, etc. Interchangeable with “commercial.”
<b>Open Collection</b>	A solid waste collection system in which multiple waste haulers or collectors compete for collection accounts in the same geographical area.

Term	Definition
<b>Organics</b>	Organics is an overarching term for wastes that can be reused, processed and recycled and includes yard waste (leaves, grass, tree and shrub waste and other plant waste), household vegetable/kitchen scraps, commercially generated food waste, food manufacturing/production by-products, produce and meat trimmings, plant waste, and soiled, non-recyclable paper.
<b>Organized Collection</b>	A system for collecting solid waste in which a specified collector, or a member of an organization of collectors, is authorized to collect from a defined geographic service area or areas some or all of the solid waste that is released by generators for collection. (Minn. Stat. §115A.94, Subd. 1)
<b>Pollution Prevention</b>	Eliminating or reducing at the source the use, generation, or release of toxic pollutants, hazardous substances, and hazardous wastes. (Minn. Stat. §115D.03, Subd. 8.)
<b>Problem Material</b>	Material that, when it is processed or disposed of with mixed municipal solid waste, contributes to one of the following results: 1) the release of a hazardous substance, or pollutant or contaminant, as defined in section 115B.02, subdivisions 8,13, and 15; 2) pollution of water, as defined in section 115.01, subdivision 5; 3) air pollution, as defined in section 116.06, subdivision 3; or 4) a significant threat to the safe or efficient operation of a solid waste processing facility. The four conditions are further defined in (Minn. Stat. §115A.03, Subd. 24a).
<b>Processible Waste</b>	Acceptable waste brought to a resource recovery facility that may be mechanically processed using the existing technology at the facility.
<b>Processing</b>	The treatment of waste after collection and before disposal. Processing includes but is not limited to reduction, storage, separation, exchange, resource recovery, physical, chemical, or biological modification, and transfer from one waste facility to another. (Minn. Stat. §115A.03, Subd. 25) For purposes of certification of unprocessed waste, per Minn. Stat. §473.848, “storage,” “exchange,” and “transfer” are excluded.
<b>Product Stewardship</b>	The concept that all parties who have a role in producing, selling or using a product, including material suppliers, manufacturers, retailers and consumers, assume responsibility for the environmental impacts of a product throughout its life-cycle. These include impacts from the selection of raw materials, the design and production processes, and the use and disposal of the product.
<b>Public Entities</b>	Any unit of State or local government, including counties, cities, towns, metropolitan agencies and districts, special districts, school districts, or any other general or special purpose unit of government in the state. (Minn. Stat. §115A.471) With regard to certain public entity procurement standards established in Minn. Stat. §16B.122, “public entities” also includes any contractor acting pursuant to a contract with a public entity.
<b>Reciprocal Use Agreement</b>	An agreement among counties to allow residents of one county to use certain services (e.g., household hazardous waste collection) provided by another county that is party to the agreement
<b>Recyclable Materials (Recyclables)</b>	Materials that are separated from mixed municipal solid waste for recycling, including paper, glass, plastics, metals, automobile oil, and batteries. Refuse-derived fuel or other material that is destroyed by incineration is not a recyclable material. (Minn. Stat. § 115A.03, Subd. 25a)

Term	Definition
<b>Recycled-content</b>	Used to describe a product that contains recycled materials. Often further clarified as to “post-consumer” recycled content and/or “pre-consumer” or “post-industrial” content. “Post-consumer” refers to a finished material that would normally have been discarded as solid waste, having completed its life cycle as a consumer item (Minn. Stat. §16B.122, Subd. 1c; and Minn. Stat. §115A.03, Subd. 24b), but instead was used to manufacture a recycled-content product. “Post-consumer” is typically thought of as those recyclable materials collected from residents and businesses in recycling programs. “Pre-consumer” or “post-industrial” typically refer to recyclable materials that come from manufacturers and product converters, including damaged or obsolete products, overruns, and trimmings. These materials have not yet completed a life cycle as a consumer item.
<b>Recycling</b>	The process of collecting and preparing recyclable materials and reusing the materials in their original form or using them in manufacturing processes that do not cause the destruction of recyclable materials in a manner that precludes further use. (Minn. Stat. §115A.03, Subd. 25b)
<b>Refuse-derived Fuel</b>	The product resulting from techniques or processes used to prepare solid waste by shredding, sorting, or compacting for use as an energy source. It consists of lighter weight materials such as paper products, with most metals, glass, and other non-combustible materials removed.
<b>Residuals, Residue</b>	Waste materials remaining after processing waste for the separation and recovery of materials or energy.
<b>Resource Conservation</b>	Preserving raw materials, energy, water, or other materials for future use.
<b>Resource Recovery</b>	The reclamation for sale, use, or reuse of materials, substances, energy, or other products contained within or derived from waste. (Minn. Stat. § 115A.03, Subd. 27) Resource recovery is typically used to refer to the recovery of energy and usable materials during the processing of mixed municipal solid waste.
<b>Resource Recovery Facility</b>	A waste facility established and used primarily for resource recovery, including and appurtenant facilities such as transmission facilities and transfer stations primarily serving the resource recovery facility. (Minn. Stat. §115A.03, Subd. 28)
<b>Reuse</b>	The practice of avoiding disposal of material that would become solid waste were it not put to use again in its original form.
<b>Select Committee on Recycling and the Environment (SCORE)</b>	Acronym for “Select Committee on Recycling and the Environment,” a State task force appointed by the Governor in the 1980’s to recommend strategies for supporting recycling in Minnesota. “SCORE” is commonly used to refer to State grant funding to counties to support local source reduction and recycling programs.
<b>Separately Managed Wastes</b>	Waste materials that are managed as discrete waste streams, such as lead-acid batteries, recyclables, or infectious wastes.

Term	Definition
<b>Service Charge</b>	Under the authority granted in Minn. Stat. §400.08 and §473.811, subd. 8a, a fee collected for services rendered by a county or by extension through joint powers agreements, by municipalities of the County.
<b>Solid Waste</b>	Garbage, refuse, sludge from a water supply treatment plant or air contaminant treatment facility, and other discarded waste materials and sludges, in solid, semisolid, liquid, or contained gaseous form, resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include hazardous waste; animal waste used as fertilizer, earthen fill, boulders, rock; sewage sludge, solid or dissolved material in domestic sewage or other common pollutants in water resources, such as silt, dissolved or suspended solids in industrial waste water effluents or discharges which are point sources subject to permits (in federal law), dissolved materials in irrigation return flows; or source, special nuclear, or by-product material as defined by The Atomic Energy Act of 1954, as amended. (Minn. Stat. Sec. 116.06. Subd. 22)
<b>Solid Waste Management Tax</b>	A percentage tax collected by the State for management services for MSW and non-MSW (specifically construction waste, infectious waste, and industrial waste). Services subject to the tax include collection, transportation, processing, and disposal. Service providers (such as haulers and landfill operators) who directly bill generators or customers are responsible for collecting and remitting the tax. The rate in 1998 is 9.75% for residential generators and 17% for commercial generators.
<b>Source Reduction</b>	An activity that prevents generation of waste or the inclusion of toxic materials in waste, including: (1) reusing a production in its original form; (2) increasing the life span of a product; (3) reducing material or the toxicity of material used in production or packaging; or (4) changing procurement, consumption, or waste generation habits in smaller quantities or lower toxicity of waste generated. (Minn. Stat. §115A.03, Subd. 36b)
<b>Source Separation</b>	Separation of recyclable, compostable, or other materials by the waste generator prior to collection.
<b>Source-separated Compostable Materials</b>	<p>"Source-separated compostable materials" refers to materials that:</p> <ol style="list-style-type: none"> <li>(1) are separated at the source by waste generators for the purpose of preparing them for use as compost;</li> <li>(2) are collected separately from mixed municipal solid waste, and are governed by the licensing provisions of section 115A.93;</li> <li>(3) are comprised of food wastes, fish and animal waste, plant materials, diapers, sanitary products, and paper that is not recyclable because the commissioner has determined that no other person is willing to accept the paper for recycling;</li> <li>(4) are delivered to a facility to undergo controlled microbial degradation to yield a humus-like product meeting the agency's class I or class II, or equivalent, compost standards and where process residues do not exceed 15 percent by weight of the total material delivered to the facility; and</li> <li>(5) may be delivered to a transfer station, mixed municipal solid waste processing facility, or recycling facility only for the purposes of composting or transfer to a composting facility, unless the commissioner determines that no other person is willing to accept the materials.</li> </ol>

Term	Definition
	(Subd. 32b.MS 1994 [Renumbered subd 32d])
<b>Source-separated recyclable materials</b>	Recyclable materials, including commingled recyclable materials that are separated by the generator.
<b>Solid Waste</b>	Garbage, refuse, sludge from a water supply treatment plant or air contaminant treatment facility, and other discarded waste materials and sludges, in solid, semisolid, liquid, or contained gaseous form, resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include hazardous waste; animal waste used as fertilizer, earthen fill, boulders, rock; sewage sludge, solid or dissolved material in domestic sewage or other common pollutants in water resources, such as silt, dissolved or suspended solids in industrial waste water effluents or discharges which are point sources subject to permits (in federal law), dissolved materials in irrigation return flows; or source, special nuclear, or by-product material as defined by The Atomic Energy Act of 1954, as amended. (Minn. Stat. Sec. 116.06, Subd. 22)
<b>Sustainable Building</b>	The Minnesota Pollution Control Agency defines a "sustainable building" as one that is healthy and comfortable for its occupants and is economical to operate. It conserves resources (including energy, water, raw materials and land) and minimizes the generation of toxic materials and waste in its design, construction, landscaping, and operation. A green building also consider historic preservation and access to public infrastructure systems, as well as the entire life cycle of the building and its components.
<b>Tipping Fee</b>	The fee charged by solid waste facilities to waste haulers, collectors, or other parties for the privilege of depositing or "tipping" waste.
<b>Toxicity</b>	Under Minn. R. 7045.0131, toxicity is one of the six characteristics of hazardous waste. Contaminants of concern include heavy metals, such as lead or mercury, volatile organic compounds, such as benzene or chloroform, semi-volatile organic compounds, such as pyridine or nitrobenzene, and pesticides/herbicides, such as endrin or lindane.
<b>Toxicity Reduction</b>	Term used to refer to efforts to reduce the toxic or hazardous character of the waste stream.
<b>Transfer Station</b>	An intermediate waste facility in which waste collected from any source is temporarily deposited to await transportation to another waste facility. (Minn. Stat. §115A.03, Subd. 33)
<b>Unacceptable Waste</b>	Waste that is not acceptable at a resource recovery facility under the terms of the service agreement.
<b>Volume-based (Weight-based) Fees</b>	A graduated pricing system for waste collection services in which the fees increase for larger quantities of waste collected.

Term	Definition
<b>Waste</b>	Solid waste, sewage sludge, and hazardous waste. (Minn. Stat. §115A.03, Subd. 34)
<b>Waste Reduction</b>	See <i>Source Reduction</i> .
<b>Yard Waste</b>	Soft-bodied garden wastes such as leaves, lawn cuttings, and weeds and other waste such as shrub and tree waste, and pruning clippings. (Minn. Stat. §115A.03, Subd. 38)

#### APPENDIX 4: PLAN ADOPTION RESOLUTION

## **APPENDIX 5: SOLID WASTE ORDINANCES FOR LE SUEUR, NICOLLET AND SIBLEY COUNTIES**

### **A. LE SUEUR COUNTY ORDINANCE**

#### **THE SOLID WASTE MANAGEMENT ORDINANCE FOR LE SUEUR COUNTY**

The Solid Waste Management Ordinance for Le Sueur County is an ordinance authorizing and providing for County Solid Waste Management; establishing powers and duties in connection therewith; establishing standards and requirements for solid waste management operations within the incorporated and unincorporated areas of the County of Le Sueur; requiring licenses and permits for storage, collection, transportation, processing, and disposal of solid waste in accordance with the Le Sueur County Solid Waste Management Plan; embodying and supplementing the minimum standards and requirements established by rules of the Minnesota Pollution Control Agency; providing for enforcement of said requirements; imposing penalties for failure to comply with these provisions; requiring performance bonds and insurance; and promoting the health, safety, and welfare of the public.

The County Board of Le Sueur County, under authority provided in Chapters 115, 115A, 116, 145.22, 375, 400, 561.01, and 609.74 of the Minnesota Statutes, does ordain:

#### **SECTION 1: PURPOSE AND GOALS**

The Le Sueur County Board has determined this regulation be adopted to:

- 1.01 Protect the Public's health, prevent public nuisances, and prevent contamination of the groundwater and other environments of Le Sueur County from solid waste through the control of number, location and operation of such facilities.
- 1.02 Preserve and protect our land and water resources.
- 1.03 Assure that all individuals are informed and responsible for their actions regarding solid waste that may affect the environment and the community now and in the future.

- 1.04 Support activities that will promote use and reuse of materials found in solid waste that would otherwise be disposed in ways that would not recapture the useful characteristics of its components.
- 1.05 Augment, supplement and support existing Le Sueur County and State of Minnesota controls on solid waste.
- 1.06 Embody the purpose found in Minnesota State Laws and Rules on Solid Waste.
- 1.07 The Le Sueur County Solid Waste Ordinance shall follow Minnesota Statutes, Chapters 115, 115A, 116, 145.22, 375, 400, 561.01, and 609.74.

## SECTION 2: DEFINITIONS

The following words and phrases, when used in this ordinance, unless the context clearly indicates otherwise, shall have the meanings ascribed to them in this section.

- 2.01 **Adequate turf.** A living ground cover of native perennial grasses or other suitable vegetation free of noxious weeds which provides ground cover to effectively prevent loss of final cover by winds or water erosion.
- 2.02 **Agency.** The Minnesota Pollution Control Agency (MPCA).
- 2.03 **Air Pollution.** The presence in the outdoor atmosphere of any air contaminant or combination thereof in such quantity, of such nature and duration, and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property.
- 2.04 **Cell.** Compacted solid wastes that are enclosed by cover material in a land disposal site.
- 2.05 **Closure.** The period after solid wastes are no longer accepted during which time the permittee completes the required procedures herein prescribed.
- 2.06 **Collection.** The aggregation of solid waste from the place at which it is generated, and includes all activities up to the time the waste is delivered to a solid waste facility.
- 2.07 **Commercial hauler.** Any person who provides a service for the collection and transportation of any type of solid waste.
- 2.08 **Composting.** The controlled microbial degradation of organic waste to yield a humus like product.

- 2.09 **County.** Le Sueur County, Minnesota.
- 2.10 **County Board.** The Le Sueur County Board of Commissioners.
- 2.11 **Cover Material.** Material that is approved by the Department that is used to cover compacted solid waste in a land disposal site. Important general characteristics of good cover material are low permeability, uniform texture, cohesiveness, and compactibility.
- 2.12 **Decomposition Gases.** Gases produced by chemical or microbial activity during the decomposition of solid waste.
- 2.13 **Demolition Waste.** Is defined as solid waste resulting from the demolition of buildings, roads, and other man made structures including concrete, bricks, bituminous concrete, untreated wood, masonry, glass, rock, and plastic building parts, and other inert waste materials as may be approved by the Department. Demolition debris does not include friable asbestos wastes.
- 2.14 **Demolition Waste Disposal Facility.** Is defined as an area of land used for the disposal of Demolition Waste without creating nuisances or hazards to the environment and public health or safety.
- 2.15 **Densified Refuse Derived Fuels or dRDF.** Prepared refuse derived fuels that are pelletized or formed into blocks.
- 2.16 **Department.** Is defined as Le Sueur County Solid Waste Office.
- 2.17 **Disposal or dispose.** The discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste into or on any land or water so that the waste or any constituent thereof may enter the environment or be emitted into the air, or discharged into any water, including ground waters.
- 2.18 **Existing Facility.** A facility that is in operation or on which construction has commenced on or before the effective date of this ordinance. A facility has commenced construction if the owner or operator has obtained permits and approvals necessary under federal, state, and local statutes, rules and ordinances and the on-site construction program has begun or the owner or operator has entered into contractual agreements that cannot be canceled or modified without substantial loss.
- 2.19 **Facility.** The land, structures, monitoring devices, and other improvements on the land used for monitoring, treating, processing, storing, or disposing of solid waste, leachate, or residuals from solid waste processing.
- 2.20 **Farm.** A parcel of land located in an Agricultural Zoning District as defined by the Le Sueur County Zoning Ordinance.

- 2.21 **Final Solid Waste Disposal.** The site, facility, operating procedures, and maintenance thereof for the complete and ultimate disposal of solid waste by the sanitary landfill method in accordance with the MPCA Rules and this ordinance.
- 2.22 **Flood Plain.** Any land that is subject to a one percent or greater chance of flooding in any given year from any source.
- 2.23 **Garbage.** Discarded material resulting from the handling, processing, storage, preparation, serving, and consumption of food.
- 2.24 **Ground Water.** The water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined or perched conditions in near surface unconsolidated sediment or regolith, or in rock formations deeper underground. The term ground water shall be synonymous with underground water.
- 2.25 **Hazardous Waste/Hazardous Substance.** Hazardous Waste or Hazardous Substance has the meanings given it in Minnesota Statutes, section 115 B.02, subdivision 8.
- 2.26 **High Density Compaction.** Compressing solid waste into blocks or bales using specialized compaction equipment in order to achieve volume reduction.
- 2.27 **Incineration.** The process of burning wastes for the purpose of volume and weight reduction in facilities designed for such use.
- 2.28 **Industrial Waste.** All solid waste generated from an industrial or manufacturing process and solid waste generated from nonmanufacturing activities such as service and commercial establishments. Industrial waste does not include office materials, restaurant and food preparation waste, discarded machinery, demolition debris waste, or household refuse.
- 2.29 **Land Disposal Site.** Any tract or parcel of land, including any construction facility, at which solid waste is disposed of in or on the land.
- 2.30 **Leachate.** Liquid that has percolated through solid waste and has extracted, dissolved or suspended materials from it.
- 2.31 **Licensee.** Is defined as the Person who has been given authority by the County Board or the Department to carry out any of the activities for which a license is required under the provisions of the ordinance.
- 2.31a **Major Appliances.** Are defined as clothes washers and dryers, dishwashers, hot water heaters, residential furnaces, garbage disposals, trash compactors, conventional and microwave ovens, ranges and stoves, air conditioners, dehumidifiers, refrigerators, and freezers.

- 2.32 **Mixed Municipal Solid Waste (MMSW).** Garbage, refuse, and other solid waste from residential, commercial, industrial, and community activities that the generator of the waste aggregates for collection, but does not include auto hulks, street sweepings, ash, construction debris, mining waste, sludges, tree and agricultural waste, tires, lead acid batteries, used oil, and other materials collected, processed, and disposed of as separate waste streams.
- 2.33 **Mixed Municipal Solid Waste Land Disposal Facility.** A site used for the disposal of mixed municipal solid waste in or on the land.
- 2.34 **Monitoring Point.** Any installation or location used to determine the quality or physical characteristics of ground water, surface water, or water in the unsaturated zone.
- 2.35 **Municipality.** A city, village, county, town, sanitary district or other governmental subdivision or public corporation, or agency created by the legislature.
- 2.36 **Nonconforming Solid Waste Disposal Site or Facility.** Is defined as a public or private solid waste disposal site or facility that does not hold a current license by the County and a current permit from the Minnesota Pollution Control Agency.
- 2.37 **Open Burning.** Burning any matter whereby the resultant combustion products are emitted directly to open atmosphere without passing through an adequate stack, duct or chimney.
- 2.38 **Open Dump.** A land disposal site at which solid waste is disposed of in a manner that does not protect the environment, is susceptible to open burning and is exposed to the elements, fires, rodents and scavengers.
- 2.39 **Operator.** The person or persons responsible for the overall operation of a facility.
- 2.40 **Owner.** The person or persons who own a facility or part of a facility.
- 2.41 **Permittee.** Is defined as the Person, Firm, Corporation or organization who has been given authority by the County Board or the Department to carry out any of the activities for which a permit is required under the provisions of this ordinance.
- 2.42 **Person/s.** Is defined as any human being, any municipality or other governmental or political subdivision or other public agency, and public or private corporation, any partnership firm, association, or other organization, any receiver, trustee, assignee, agent or other legal representative of any of the foregoing or any other legal entity.
- 2.43 **Pollutant.** Has the meaning given it in Minnesota Statutes, Chapter 115A.

- 2.44 **Post-Closure.** The period after closure during which the long term care, maintenance, and monitoring of a site or facility takes place.
- 2.45 **Processing.** The treatment of solid waste after collection and before disposal. Processing includes but is not limited to volume reduction, storage, separation, exchange, resource recovery, physical, chemical, or biological modification, and transfer from one waste facility to another.
- 2.46 **Processing Facility.** Processing facility includes composting, co-composting, RDF/dRDF production and other means of volume reduction, separation, resource recovery, physical, chemical or biological modification. A transfer station used for transferring waste from one location to another is not considered a processing facility under this ordinance.
- 2.47 **Putrescible Material.** Is defined as Solid Waste which is capable of becoming rotten and which may reach a foul state of decay or decomposition.
- 2.48 **Recycling Facility.** A site to separate, process, modify, convert, or otherwise prepare solid waste so that component materials or substances may be beneficially used or reused as raw materials.
- 2.49 **Refuse.** Putrescible and nonputrescible solid wastes, including garbage, rubbish, ashes, incinerator ash, incinerator residue, street cleanings, and market and industrial solid wastes, and including municipal treatment wastes which do not contain free moisture.
- 2.50 **Refuse Collection Service.** A public or private operation engaged in solid waste collection and solid waste transportation.
- 2.51 **Refuse Derived Fuels (RDF).** The product resulting from techniques or processes used to prepare solid waste by shredding, sorting, or compacting for use as an energy source.
- 2.52 **Resource Recovery.** The reclamation for sale, use, or reuse of materials, substances, energy, or other products contained within or derived from waste.
- 2.53 **Rubbish.** Nonputrescible solid waste, including ashes, consisting of both combustible and non-combustible wastes, such as paper, cardboard, tin cans, yard clippings, wood, glass, bedding, crockery, or litter of any kind.
- 2.54 **Runoff.** The portion of precipitation that drains from an area as surface flow.
- 2.55 **Scavenging.** Uncontrolled removal of solid waste materials from any location or licensed solid waste disposal facility.

- 2.56 **Shoreland.** Is defined as land located within the following distances from the ordinary high water elevation of public waters:
- (a) Land within 1,000 feet from the normal high watermark of a lake, pond, reservoir, impoundment, or flowage; and
  - (b) Land within 300 feet of a river or stream or the landward side of flood plain delineated by ordinance on such a river or stream, whichever is greater.
- 2.57 **Sludge Waste.** Is defined as inorganic waste in a semi-liquid state, excluding toxic and hazardous waste, but including waste from automobile wash racks and steam cleaning products, ceramic, pottery and glass wastes, muddied water from laundries and similar non-toxic materials.
- 2.58 **Solid Waste.** Garbage, refuse, sludge from a water supply treatment plant or air contaminant treatment facility, and other discarded solid materials and sludges, in solid, semi-solid, liquid, or contained gaseous form, resulting from industrial, commercial, mining and agricultural operations, and from community activities, but does not include, hazardous waste, animal waste used as fertilizer, earthen fill, boulders, rock and other materials normally handled in construction operations, solids or dissolved material in domestic sewage or other significant pollutants in waste resources, such as silt, dissolved or suspended solids in industrial waste water effluents, dissolved materials in irrigation return flow, or other common water pollutants.
- 2.59 **Solid Waste Collection.** The gathering of solid waste from public or private places.
- 2.60 **Solid Waste Management Plan.** The Le Sueur County Solid Waste Management Plan, dated February, 1988 and amendments thereto.
- 2.61 **Solid Waste Management System.** A total system for the storage, collection, transportation and final disposal of solid waste.
- 2.62 **Solid Waste Storage or Storage.** The holding of solid waste near the point of generation for more than 48 hours in quantities equal to or greater than two (2) cubic yards.
- 2.63 **Solid Waste Transportation.** The conveying of solid waste from one place to another, by means of vehicle, rail car, water vessel, conveyor or other means.
- 2.64 **Source Separated Materials.** Materials that are separated from solid waste by the generator and recovered for reuse in their original form or for use in manufacturing processes.

- 2.65 **Special Wastes.** Nonhazardous solid wastes requiring management other than that normally used for mixed municipal solid waste.
- 2.66 **State.** The State of Minnesota.
- 2.66a **Telephone directory.** A printed list of residential, governmental, or commercial telephone service subscribers or users, or a combination of subscribers or users, that contains more than 7,500 listings and is distributed to the subscribers or users.
- 2.67 **Tipping Fee.** The fee charged to collectors and citizens for waste delivered to the facility.
- 2.68 **Transfer Station.** A facility in which solid waste from collection vehicles is concentrated for subsequent transport. A transfer station may be fixed or mobile.
- 2.69 **Waste Processing.** The treatment of solid waste after collection and before disposal. Processing includes but is not limited to volume reduction, storage, separation, exchange, resource recovery, physical, chemical, or biological modification, and the transfer from one waste facility to another.
- 2.70 **Waste Tire.** Means a pneumatic tire or solid tire for motor vehicles that has been discarded or that can no longer be used for its original intended purpose because of wear, damage, or defect.
- 2.71 **Waste Tire Collection Site.** Means a licensed Waste Facility used for the storage of Waste Tires prior to their transport to a Waste Tire Processing Facility.
- 2.72 **Waste Tire Processing Facility.** Means a licensed Waste Facility used for the shredding, slicing, processing or manufacturing of usable materials from Waste Tires, and may include temporary storage activity. Processing does not include the retreading of Waste Tires.
- 2.73 **Water Monitoring System.** A system of wells, lysimeters, or other mechanisms used to obtain representative samples of both underground water and surface water where required in the vicinity of a land disposal site.
- 2.74 **Water Table.** The surface of the ground water at which the pressure is atmospheric. Generally, this is the top of the saturated zone.
- 2.75 **Wetland.** A natural marsh where water stands near, at or above the soil surface during a significant portion of most years, and which is eligible for classification as an inland fresh water wetland type 3,4 or 5 under U.S. Department of Interior classifications.

- 2.76 **Working Face.** That portion of the land disposal site where waste is discharged and is spread and compacted prior to the placement of cover materials.
- 2.77 **Yard Waste.** Garden waste, leaves, lawn cuttings, weeds, shrub and tree waste, and prunings generated on residential or commercial properties.

### **SECTION 3: ADMINISTRATION**

#### **3.01 Solid Waste Officer**

The Solid Waste Officer of Le Sueur County shall be appointed by the Le Sueur County Board of Commissioners.

#### **3.02 Authority**

The Solid Waste Officer has been given authority by the Le Sueur County Board of Commissioners. The Solid Waste Officer shall have all necessary authority to implement and carry out the provisions of this ordinance including, but not limited, to the following:

1. To review and consider all applications and supporting materials which are referred to the Department for operations within the County, and after such review and consideration, to recommend in writing with documentation to the County Board whether a permit should be granted or denied.
2. To inspect operations to determine compliance and to investigate complaints about violations of this ordinance.
3. To recommend to the County Attorney that legal proceedings be initiated against a person or group of persons to compel compliance with the provisions of this ordinance or to terminate or control an operation not in compliance with this ordinance.
4. To encourage and conduct studies, investigations and research relating to aspects of solid waste management, including, but not limited to, methodology, chemical and physical considerations, and engineering.
5. To advise, consult, and cooperate with the public and other governmental agencies in furtherance of the purpose of this ordinance.

### 3.03 Application and Permits

Subsection 1. Unless otherwise provided by this ordinance, no person shall cause, permit or allow real or personal property under his or her control to be used for solid waste management purposes, except at an operation for which a permit has been granted by the County Board. For the purpose of this ordinance, solid waste management includes the following specific activities:

1. Operation of MMSW Land Disposal Facilities.
2. Operation of Demolition Waste Disposal Facilities.
3. Operation of MMSW Incinerator Facilities.
4. Operation of MMSW Processing Facilities.
5. Operation of Recycling Facilities.
6. Operation of Transfer Facilities.
7. Operation of Solid Waste Storage.
8. Operation of Waste Tires Facilities.
9. Collection and Transportation of Solid Waste.

Subsection 2. An applicant for a permit to operate a waste facility or activity shall complete and submit to the Department an application on forms provided by the Department. The application shall not be considered complete until the Department receives all applicable fees, all materials required by this section, and all materials required by subsequent sections applying to the specific management activity for which a permit is sought. Following review of the application by the Department, the County Board shall approve or deny an operating permit or request additional information as outlined in this ordinance.

Applicants for a permit shall not commence any construction until a permit has been granted by the County Board, and a permit issued by the Department

A waste facility shall not commence operation until the facility has been constructed in compliance with the engineering plans and has been inspected and approved by the Department.

- Subsection 3. A non-transferable permit issued by the Department shall be required for the operation of solid waste facilities and other activities involving solid waste.
- Subsection 4. Unless otherwise provided by the Board, each permit granted pursuant to the provisions of this ordinance shall be for a period as stipulated in the appendices of the ordinance, unless earlier suspended or revoked. The permit year for solid waste sites, facilities, operations and activities shall be from May 1 - April 30.
- Subsection 5. Depending on the complexity, size and type of solid waste facility or activity, the applicant for a permit or permit renewal may be required to submit complete sets of plans, specifications and/or reports. Minimum requirements for the various solid waste facilities and activities may be found in the following appendices:
1. Appendix A: Mixed Municipal Solid Waste Disposal Facilities.
  2. Appendix B: Demolition Waste Disposal Facilities.
  3. Appendix C: Incinerator Facilities.
  4. Appendix D: MMSW Processing Facilities.
  5. Appendix E: Recycling Facilities.
  6. Appendix F: Transfer Station Facilities.
  7. Appendix G: Solid Waste Storage.
  8. Appendix H: Waste Tire Facilities.
  9. Appendix I: Collection and Transportation of Solid Waste.
- Subsection 6. The applicant shall submit written proof that the municipal or township governing body in which solid waste facilities, operations or activities are located has considered the establishment of solid waste facilities, operations or activities with respect to zoning and other applicable regulations and the results of that consideration.
- Subsection 7. All submittals to the State during the state permitting and/or licensing process, operation, and the closure/post-closure care time period for solid waste facilities shall also be submitted to the Department.

- Subsection 8. The applicant shall submit additional data requested by the Department. The Department may waive a requirement for submitting certain information if such a waiver will not endanger the health or safety of the public.
- Subsection 9. After receiving a completed application for the operation of a solid waste facility or activity, the Department shall submit the application to the Board at earliest convenient time and the Board shall have 30 days to either grant or deny the permit or permit renewal. Submission of false information may constitute grounds for denying a permit or permit renewal, or suspension by revocation of an issued permit.
- Subsection 10. Unless otherwise provided by the County Board, issuance of any permit pursuant to the provisions of this ordinance shall be contingent upon the applicant furnishing to the County a performance bond, in an amount to be set by the County Board, and naming the County as obligee with sufficient sureties duly licensed and authorized to transact corporate surety business in the State of Minnesota as sureties. The condition of such bond shall be that if the principal fails to obey any of the requirements or do any of the acts required by this ordinance in the operation of the waste facility or activity, or if, for any reason, ceases to operate or abandons the waste facility or activity, and the County is required to expend any monies or expend any labor or material to restore the facility to the condition and requirements as provided by the ordinance, the obligor and the sureties on its bond shall reimburse the County for any and all expense incurred to remedy the failure of the principal to comply with the terms of the ordinance, and the obligor and its sureties will indemnify and save the County harmless from all losses, costs and charges that may occur to the County because of any default of the obligor under the terms of his license to operate and the ordinances of the County. The performance bond shall be subject to cancellation by the surety at any time only upon giving one hundred twenty (120) days prior written notice of cancellation to the County. In lieu of part or all of said bond, the license may provide evidence of financial assurance in a form acceptable to the County Board to be used to bring the facility or activity into compliance with said requirements.
- Subsection 11. The permittee shall furnish to the County certificates of insurance issued by insurers duly licensed within the State of Minnesota covering public liability insurance, including general liability, automobile liability, completed

operations liability, and bodily injury liability in amounts to be set by the County Board. In addition, the permittee shall provide evidence of worker's compensation coverage in the required statutory amounts.

Subsection 12. Unless otherwise provided by the Board, issuance or renewal of any permit shall be contingent upon the owner of the site or facility or the operator or both providing proof of financial assurance for the closure, post-closure maintenance and monitoring of the site or facility. Use of the financial assurance shall be limited to the site or facility for which it was provided.

Documentation submitted with the application for the Department review shall include funding procedures, a description of the funding method, the value of the funding, and an inflation adjusted cost estimate which assures that the closure and post-closure activities at the site or facility take place. The amount of the financial assurance shall be equal to or exceed the total estimated post-closure costs specified in the approved post-closure plan.

Subsection 13. The County board shall, by resolution, establish fees, including fees for the application, annual permit, and such other fees as may be necessary for the administration of this ordinance. The County Board may waive fees for any political subdivision applying for a solid waste permit.

### **3.04 Operation Reporting**

During the life of the permit or license, the licensee and/or permittee shall annually report, on forms provided by the Department, information requested relative to operations. In addition, copies of all correspondence with the State relating to the operation shall be provided to the Department in a timely Manner

### **3.05 Existing Solid Waste Facilities, Operations and Activities**

Solid Waste Facilities, operations and activities in existence at the time of the enactment of this ordinance, shall conform to the provisions of this ordinance no later than 365 days after the adoption of the ordinance, or terminate operations no later than that date, unless the Department grants a variance for good cause shown under this section to continue operations. A request for this kind of variance shall be accompanied by a plan and time schedule for compliance with the provisions of this ordinance.

### **3.06 Anti-Scavenging Provision.**

Subsection 1. Ownership of the separated recyclable materials set out by a customer for collection by recycling collectors shall be

vested in the recycling collector servicing the Person who is recycling. It shall be unlawful and an offense against this Ordinance (except as noted in Subsection 2. below) for any person other than the owner, lessee, or occupant of a residential dwelling or commercial/industrial business, to pick up said separated recyclable materials for any purpose.

Subsection 2. Persons or organizations other than a licensed recyclables collector may not collect recyclables (except at a drop off or redemption site) unless they obtain written permission from the Department. Permission will be granted to any organization to collect recyclables at the curb side providing the following conditions are met and evidence thereof is provided to the Department.

- a. For single and multi-family residential customers, written permission must be granted by the recyclable collector servicing the accounts to be collected from.
- b. Information regarding the quantities of recyclable materials collected and marketed shall be provided to the Department on or before January 31 of each year.

### **3.07 County Fee**

There is imposed a fee on operators of facilities which accept and dispose of mixed municipal solid waste in Le Sueur County. The fee shall be set by the Board and will be assessed per gate cubic yard. For those facilities that weigh waste, the fee will be assessed using 600 pounds per gate cubic yard.

### **3.08 Solid Waste Service Charge**

Subsection 1. SERVICE CHARGE. This section is enacted pursuant to Minnesota Statute 400.08, which grants Le Sueur County the authority to impose reasonable charges for solid waste management and disposal. The purpose of this section is to establish a method of collection for such charges.

1. Method of Billing and Collecting Service Charge. The charges will be billed and collected as a charge on the applicable Le Sueur County tax statements as determined by the rate schedule.
2. Unpaid Charges. On or before October 15 in each year, the County Board shall certify to the County Auditor all unpaid outstanding charges and a description of the lands against which the charges arose. It shall be the duty of the County Auditor, upon order of the County Board, to extend the

assessments with an interest rate provided for in Minnesota Statutes, Section 279.03, Subd. 1, upon the tax rolls of the County for the taxes of the year in which the assessment is filed. For each year ending October 15, the assessment with interest shall be carried into the tax, becoming due and payable in January of the following year and shall be enforced and collected of real property taxes according to the provisions of the laws of the state. The charges, if not paid, shall become delinquent and be subject to the same penalties and the same rate of interest as the taxes under the general laws of the state.

3. Rates and Charges. The County Board, by resolution, may establish or revise the rate schedule for solid waste management services. All rates and charges shall be uniform in their application to use and service of the same character and quantity. A copy of the current rate schedule shall be kept on file in the Solid Waste office. If no new rate schedule for solid waste management services is adopted in any year, the rate schedule for the previous year shall remain in effect.

In establishing or revising the rate schedule, the Board may consider all factors relevant to solid waste management and disposal. Such factors include, but are not limited to, the character, kind, and quality of service and of solid waste; the method of disposition; the number of people served at each place of collection; and all other factors that enter into the cost of the providing service, including but not limited to, public education, recycling programs, solid waste management facilities operating, and debt service cost.

4. Appeals. Any property owner who believes that the service charge imposed upon his property is incorrect may appeal the charge. An appeal form may be obtained at the Solid Waste office and shall be filed within 30 days of mailing the service charge statement by the County. The Solid Waste Officer shall, within 30 days of receipt of the appeal, review the appeal and notify the appellant by U.S. mail whether an adjustment is due and how much or whether the appeal is denied.

Subsection 2. Service Area. This section is enacted pursuant to Minnesota Statutes, Section 400.08, which grants Le Sueur County the authority to establish and determine the

boundaries of solid waste management service areas in the County.

There shall be separate service areas or zones established within Le Sueur County as determined by the level of solid waste management services provided to each service area or zone. The County Board shall establish, by resolution, the boundaries of each such solid waste management service area and shall set the charges for each such service area after taking into account the character, kind, and quality of service and of the solid waste, the method of disposition, the number of people served at each place of collection, and all other factors that enter into the cost of the service, including but not limited to, depreciation and payment of principle and interest on money borrowed by the County for the acquisition or betterment of facilities.

### **3.09 Enforcement**

All provisions of this ordinance shall be enforced according to this Subsection.

1. Misdemeanor. Any Person within the County who violates this ordinance, or who shall permit such a violation to exist on the premises under his control, or who shall fail to take action to abate the existence of the violation within the specified time period when ordered or notified to do so by the Department, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished thereof, as provided by law. A separate offense shall be deemed committed upon each day during or on which a violation occurs or continues.
2. Equitable Relief. In the event of a violation or a threat of violation of this ordinance, the County Attorney may take appropriate action to enforce this ordinance, including application for injunctive relief, action to compel performance, or other appropriate action in court, if necessary, to prevent, restrain, correct, or abate such violations or threatened violations.
3. Civil Action or Cost as Special Tax. If a Person fails to comply with the provisions of this ordinance, the County may recover costs incurred for corrective action in a civil action in any court of competent jurisdiction or, at the discretion of the Department, the costs may be certified to the County Auditor as a special tax against the real property.

### **3.10 Appeals**

The Board of Commissioners of Le Sueur County shall act as a Board of Appeals. Any person wishing to appeal any action taken by the County pursuant to this Ordinance may request a hearing. The appeal must be received by the County within thirty (30) calendar days, exclusive of the day of receipt of notice, after the person received notice of the action taken by the County. The request shall be in writing stating the grounds of the appeal. If a person fails to submit an appeal within the required time period, the person shall forfeit any opportunity for a hearing. The County shall schedule a hearing within thirty (30) calendar days of receipt of the notice of appeal, and shall send to the appellant by mail notice of the hearing date, time and location. If the appellant or his or her authorized representative fails to attend the hearing, the appellant shall forfeit any right to a hearing. The Department shall send to the appellant by mail, notice of the decision of the Board of Appeals within ten (10) days after the close of the hearing.

### **3.11 Variances**

Upon written application by the applicant, owner or operator, the Board may grant variances from the requirements of the regulation and standards prescribed by this ordinance in order to promote the effective and reasonable application and enforcement of the provisions of this ordinance.

### **3.12 Illegal Dumping**

Subsection 1. It shall be a violation of this ordinance for any person to dispose of solid waste within Le Sueur County at any place except at a site or facility authorized by this ordinance.

Subsection 2. It shall be a violation of this ordinance for any person to operate an open dump; and, the owner of any dump in existence at the time this ordinance is enacted shall cease operations and close the dump in accordance with the following provisions. The owner shall:

1. Close access to the site and prohibit the public from using the site. Signs indicating that dumping is not allowed shall be posted.
2. Stop burning, if present; and remove all chemical containers
3. Eradicate rodents.
4. At the discretion of the County Board, the owner shall conduct a water monitoring program pursuant to "Procedures for Ground Water Monitoring: Minnesota Pollution Control Agency Guidelines" and take measures to protect ground and surface water. Plans to protect the ground and surface water shall be approved by the Department prior to implementation.
5. Divert surface water drainage around and away from the disposal area.
6. Compact the refuse and cover it with at least two (2) feet of compacted cover material.
7. Seed the cover material so that adequate turf is present.
8. Establish and maintain a final grade sufficient to promote water runoff without excessive erosion.
9. The owner of the property on which the illegal dump is located shall place on record an instrument with the Le Sueur County Recorder, in a form prescribed by the Department, placing the public on notice of the existence and location of the illegal dump and of the obligations placed upon parties holding an interest in the property and the restrictions which may affect the use of the property.

### **3.13 Waiver**

The Board may waive any licensing, construction, or operation requirements based upon the characteristics of the waste, the site or the proposed service, provided such a waiver will not endanger the health or safety of the public.

### **3.14 Severability**

The provisions of this ordinance are severable. Should any action, paragraph, sentence, clause, phrase, or portion of the regulation be declared invalid for any reason, the remainder of this regulation shall not be affected.

### 3.15 Repealer

Le Sueur County Solid Waste Ordinance 10-1-72 is repealed.

### 3.16 Effective Date

This regulation shall be in full force and effect upon adoption and publication pursuant to law.

Dated this 22nd day of March 1988.

LE SUEUR COUNTY BOARD OF COMMISSIONERS

Jerome E. Schleis (sig.)

Chairman

Terry Overn (sig.)

Attest: County Auditor

Amended by the County Board of Commissioners.....April 1991

Amended by the County Board of Commissioners.....November 1992

Amended by the County Board of Commissioners.....August 1993

## APPENDIX A: MIXED MUNICIPAL SOLID WASTE DISPOSAL FACILITIES

**A.01 Scope.** Any mixed municipal solid waste disposal facility shall be constructed, established, maintained and operated in accordance with the following provisions.

**A.02 Applicability.** This section shall apply to all persons seeking a permit to operate a landfill for the disposal of solid waste.

**A.03 Permit Requirements.** The applicant shall submit a complete set of plans, specifications and reports prepared by a Registered Professional Engineer under the laws of the State of Minnesota. The applicant shall furnish:

Subsection 1. Existing Conditions Plan. A current map and aerial photograph of the area showing land use and zoning within one-fourth (¼) mile of the waste site or facility. The map and aerial photograph shall be of sufficient scale to show all homes, buildings, lakes, ponds, watercourses, wetlands, dry runs, rock outcroppings, roads and other applicable

details as determined by the Department, and shall include the general topography with contours and drainage patterns. The location of wells shall be identified on the map. United States Geological Survey datum shall be included and a north arrow drawn. A locational insert shall be included.

Subsection 2. Plot Plan. A plot plan, including a legal description of the site and adjacent area, showing dimensions, location of soil borings, present and planned features, including, but not limited to roads, fencing, cover stockpiles, special construction materials and techniques, screening and monitoring points if planned for. The scale of the plot plan shall not be greater than 200 feet per inch.

Subsection 3. Site Development Plan. Site development plans shall be submitted as part of the plot plan which indicate the location and sequence of filling in phases of six (6) months duration.

Subsection 4. Cross Sections Plan. A cross sections plan, including a minimum of two cross sections of each phase, perpendicular to one another, showing existing grade, excavation grade, final grade, high water table profile, profile and identity of soils and profile and identity of bedrock.

Subsection 5. Final Contour Plan. An ultimate land use plan, identifying the total and complete land use, and showing finished contour lines and elevations. The scale of the ultimate land use plan shall not be greater than 200 feet per inch.

Subsection 6. Report. A report indicating:

1. Geographical areas expected to be served by the proposed site, current population of the areas, and projected population figures for the period of the expected life of the facility.

2. The anticipated type, quantity and source of material to be processed or disposed of at the site.
3. The type and amount of equipment to be provided at the site for waste handling.
4. The area of the site in acres.
5. The name and address of the owner of the site or facility, and the name and address of individuals responsible for actual operation and maintenance of the site.
6. The intended operating procedures.
7. An estimate of the number of vehicles using the facility each day and the volume of solid waste deposited daily.
8. A hydrogeologic study setting forth the same information as required in Minnesota Rules, Chapter 7035.
9. The source and characteristics of cover material and methods to be used for protecting it during winter.

Subsection 7. Closure and Post-Closure. An operational and financial plan for closure and post-closure indicating the estimated length of time the site will be used, the closure and post-closure actions to be taken, the costs for closure and long-term care, monitoring and maintenance of the facility for a period of at least twenty (20) years. The plan shall be written to comply with the provisions of this ordinance and applicable statutes, rules, regulations and requirements of the State. The Department shall review the plan annually until the end of the post-closure period. It shall be revised as necessary as costs and needs for closure and post-closure change and as standards set by the County and state. The plan approved for closure and post-closure and any amendments to the plan must be approved by the Department. Existing waste facilities must comply with the requirements of this when applying for license renewal.

**A.04 Construction Requirements.** The permittee of any solid waste facility shall establish, construct, and/or provide the following at the MMSW landfill site:

- Subsection 1. Comfort. Sanitary Facilities and shelters for site personnel.
- Subsection 2. Electricity. Electrical services for operations and repairs.
- Subsection 3. Fire Protection. The permittee shall arrange for fire protection services and may be required to provide written evidence of such agreement to the Department.

- Subsection 4. First Aid. Emergency first aid equipment to provide adequate treatment of accidents.
- Subsection 5. Water. A potable water supply for facility personnel.
- Subsection 6. Telephone. A telephone in working condition.
- Subsection 7. Access. A fence and gate both at least six (6) feet high that shall be locked when the attendant is not on duty.
- Subsection 8. Ingress-Egress. A road to the unloading area maintained in good condition so that it will be passable at all times.
- Subsection 9. Sign. A sign at the entrance to the facility stating the name of the facility, the schedule of days and hours the facility is open to the public, a statement that dumping or operation at any hours other than what is stated is unlawful, prices for use of the facility, the agency permit number and, if applicable, a statement and symbol indicating that recyclable materials are accepted for recycling. The Department shall approve the sign and its placement prior to licensing.
- Subsection 10. Equipment. Equipment sufficient to conduct applicable operations and sufficient reserve equipment or written agreements to immediately provide for equipment during periods of breakdown.
- Subsection 11. Public Facilities. Suitable facilities for individuals who wish to transport and dispose of their own solid waste.
- Subsection 12. Monitoring. A water monitoring program conducted pursuant to the license conditions established by the Department for the site or facility.
- Subsection 13. Litter Control. Litter control devices, such as portable wind abatement fences, close to disposal operations shall be provided in addition to the perimeter fence.
- Subsection 14. Recycling. If applicable, containers for the purpose of collecting separated recyclable materials, including but not limited to, glass, aluminum, ferrous, corrugated paper, newspaper materials and used crankcase oil. The containers are subject to approval by the Department.

**A.05 Operation Requirements.** The permittee shall operate solid waste facilities and provide evidence of such operation pursuant to the following procedures:

- Subsection 1. Burning. Open burning of solid waste is prohibited.

- Subsection 2. Scavenging. Unauthorized removal of waste materials is prohibited.
- Subsection 3. Recycling. Recycling shall be allowed only if specifically set forth in the application and license and then only if recycled materials are removed daily from the premises or placed in an approved device or building.
- Subsection 4. Litter. The permittee shall keep the site and areas along public and private access roads free of litter, and permittee shall prevent litter from blowing onto and accumulating on real property adjacent to the facility.
- Subsection 5. Nuisances. The permittee shall prevent or eliminate any public nuisance by the control of vectors, such as rodents and flies, and of odors, dust windblown material and other potential public health nuisances. Should the Department so prescribe, the permittee shall engage a pest control company licensed by the State of Minnesota to inspect the facility and perform any necessary pest eradication. The permittee shall send a copy of each inspection report to the Department within five (5) days of its receipt by the permittee.
- Subsection 6. Alterations and additions. The permittee shall make no alterations or additions affecting the construction of operational requirements of the waste facility without the written consent of the Department.
- Subsection 7. Ingress-Egress. The permittee shall control all incoming and outgoing traffic in such a manner as to provide orderly and safe ingress and egress.
- Subsection 8. Records. The permittee shall maintain in a manner acceptable to the Department, accurate daily records containing information pertinent to the facility operation. The permittee shall allow the Department and its designated agents access to said records for review and inspection at any reasonable time. Daily records shall include the intake of solid waste measured in tons or cubic yards and general areas in which a particular type of solid waste is disposed.
- Subsection 9. Animal Feeding. Prohibit animal feeding within the site.
- Subsection 10. Bedrock and Water Table. Deposit solid waste at least five (5) feet above the highest known water table and at least five (5) feet above bedrock.
- Subsection 11. Property Line. Maintain minimum separating distance of two hundred (200) feet between the disposal operation and adjacent property line.

- Subsection 12. Working Face. Permit unloading of solid waste in as small an area as practicable. The permittee shall confine wind blown materials to this area. At the conclusion of each day of operation, the permittee shall collect wind blown material and return it to the area.
- Subsection 13. Compaction. Compact solid waste by making at least three passes over the waste with suitable compaction equipment.
- Subsection 14. Water Management. Divert surface water drainage around the landfill operating area, and provide management practices to protect surface water and groundwater.
- Subsection 15. Putrescible Materials. Immediately cover and compact putrescible materials which have reached a foul state of decay or decomposition such as spoiled food or animal carcasses.
- Subsection 16. Supervision. A State Certified attendant shall be on duty at the site all times while the facility is open for public use. The attendant shall supervise the unloading of all refuse at the working face of the landfill.
- Subsection 17. Waste - Limited Disposal. The following shall not be acceptable for disposal except as contained in normal household municipal solid waste.
- a. Liquids
  - b. Hazardous waste.
  - c. Other substances that may be determined unacceptable by the Department.
- Subsection 18. Waste - Unacceptable for Disposal. The following shall not be acceptable for disposal at any time, in any quantity:
- a. Special infectious waste.
  - b. Raw sewage sludge.
  - c. Raw animal manure.
  - d. Septic tank pumpings.
  - e. Vehicles, such as automobiles and trucks.

- f. Tires.
- g. Major Appliances.
- h. Lead acid batteries.
- i. Yard waste after January 1, 1992.
- j. Oils.
- k. Telephone directories

Subsection 19. Areas Prohibited for Disposal. Fill and trench areas are prohibited within the following regions:

- a. Shoreland.
- b. Flood plain.
- c. Wetlands.

Subsection 20. Gas migration. The permittee shall not allow decomposition gases to migrate laterally from the facility. The permittee shall vent gases directly into the atmosphere through the cover material or into cut-off trenches, or into the atmosphere by forced ventilation or by other means approved by the Department so that explosive concentrations are prevented.

Subsection 21. Intermittent, intermediate, and final cover system. The owner or operator of a mixed municipal solid waste land disposal facility must design and maintain a cover system capable of minimizing infiltration of precipitation into the fill areas, preventing surface water ponding on fill areas, controlling gas movement, preventing erosion of surface and side slopes, reducing wind erosion and wind blown litter, minimizing the creation and movement of dust, retaining slope stability, reducing effects of freeze-thaw and other weather conditions, maintaining vegetative growth while minimizing root penetration of the low permeability cover layer, and discouraging vector and burrowing animal intrusion into the site. A complete cover system must consist of intermittent, intermediate, and final covers as outlined in items a to c.

- a. The owner or operator must place an intermittent cover upon all exposed solid waste in accordance with the approved operation and maintenance manual for the site. The owner or operator shall submit to the Department for approval a proposed cover system that addresses the frequency and depth of placement and

the material to be used as cover. The frequency of placement may be no less than once per day. The cover depth must be sufficient to cover the waste completely and must be at least six inches of soil or similar material is used.

- b. The owner or operator must place intermediate cover on all filled surfaces of the facility where no additional solid waste will be deposited within 30 days. The intermediate cover must consist of compacted material of sufficient depth, at least 12 inches if soil or similar material is used, to cover the waste completely, and graded to prevent surface water ponding.
- c. The owner or operator of a new mixed municipal solid waste land disposal facility or an existing facility must place final cover in compliance with Minnesota Rules Chapter 7035.2815, Subp. 6, D & E.

## **APPENDIX B: DEMOLITION AND/OR CONSTRUCTION WASTE DISPOSAL FACILITIES**

**B.01 Scope.** Any demolition waste disposal facility shall be constructed, established, maintained and operated in accordance with the following provisions.

**B.02 Applicability.** This section shall apply to all persons seeking a permit to operate a landfill for the disposal of demolition waste.

**B.03 Permit Requirements.** The applicant shall submit a complete set of plans, specifications and reports prepared by a Registered Professional Engineer under the laws of the State of Minnesota. The applicant shall furnish:

- Subsection 1. Existing Conditions Plan. A current map and aerial photograph of the area showing land use and zoning within one-fourth (¼) mile of the waste site or facility. The map and aerial photograph shall be of sufficient scale to show all homes, buildings, lakes, ponds, watercourses, wetlands, dry runs, rock outcroppings, roads and other applicable details as determined by the department, and shall include the general topography with contours and drainage patterns. The location of wells shall be identified on the map. United States Geological Survey datum shall be included and a north arrow drawn. A locational insert shall be included.

- Subsection 2. Plot Plan. A plot plan, including a legal description of the site and adjacent area, showing dimensions, location of soil borings, present and planned features, including, but not limited to roads, fencing, cover stockpiles, special construction materials and techniques, screening and monitoring points if planned for. The scale of the plot plan shall not be greater than 200 feet per inch.
- Subsection 3. Site Development Plan. Site development plans shall be submitted as part of the plot plan which indicate the location and sequence of filling in phases of six (6) months duration.
- Subsection 4. Cross Sections Plan. A cross sections plan, including a minimum of two cross sections of each phase, perpendicular to one another, showing existing grade, excavation grade, final grade, high water table profile, profile and identity of soils and profile and identity of bedrock.
- Subsection 5. Final Contour Plan. An ultimate land use plan, identifying the total and complete land use, and showing finished contour lines and elevations. The scale of the ultimate land use plan shall not be greater than 200 feet per inch.
- Subsection 6. Report. A report indicating:
1. Geographical areas expected to be served by the proposed site, current population of the areas, and projected population figures for the period of the expected life of the facility.
  2. The anticipated type, quantity and source of material to be processed or disposed of at the site.
  3. The type and amount of equipment to be provided at the site for waste handling.
  4. The area of the site in acres.
  5. The name and address of the owner of the site or facility, and the name and address of individuals responsible for actual operation and maintenance of the site.
  6. The intended operating procedures.
  7. An estimate of the number of vehicles using the facility each day and the volume of solid waste deposited daily.

8. A hydrogeologic study setting forth the same information as required in Solid Waste Rule 7035.
9. The source and characteristics of cover material and methods to be used for protecting it during winter.
10. A description of the processing methods to be used prior to final disposal of the solid waste,

Subsection 7. Closure and Post-Closure. An operational and financial plan for closure and post-closure indicating the estimated length of time the site will be used, the closure and post-closure actions to be taken, the costs for closure and long-term care, monitoring and maintenance of the facility for a period of at least twenty (20) years. The plan shall be written to comply with the provisions of this ordinance and applicable statutes, rules, regulations and requirements of the State. The Department shall review the plan annually until the end of the post-closure period. It shall be revised as necessary as costs and needs for closure and post-closure change and as standards set by the County and state. The plan approved for closure and post-closure and any amendments to the plan must be approved by the Department. Existing waste facilities must comply with the requirements of this when applying for permit renewal.

**B.04 Construction Requirements.** The permittee of any demolition waste facility shall establish and/or provide evidence of the following:

- Subsection 1. Comfort. Sanitary Facilities and shelters for site personnel.
- Subsection 2. Electricity. Electrical services for operations and repairs.
- Subsection 3. Fire Protection. The permittee shall arrange for fire protection services and may be required to provide written evidence of such agreement to the Department.
- Subsection 4. First Aid. Emergency first aid equipment to provide adequate treatment of accidents.
- Subsection 5. Water. A potable water supply for facility personnel.
- Subsection 6. Telephone. A telephone in working condition.
- Subsection 7. Access. A fence and gate both at least six (6) feet high that shall be locked when the attendant is not on duty.
- Subsection 8. Ingress-Egress. A road to the unloading area maintained in good condition so that it will be passable at all times.

- Subsection 9. Sign. A sign at the entrance to the facility stating the name of the facility, the schedule of days and hours the facility is open to the public, a statement that dumping or operation at any hours other than what is stated is unlawful, prices for use of the facility, the agency permit number and, if applicable, a statement and symbol indicating that recyclable materials are accepted for recycling. The Department shall approve the sign and its placement prior to licensing.
- Subsection 10. Equipment. Equipment sufficient to conduct applicable operations and sufficient reserve equipment or written agreements to immediately provide for equipment during periods of breakdown.
- Subsection 11. Public Facilities. Suitable facilities for individuals who wish to transport and dispose of their own solid waste.
- Subsection 12. Monitoring. A water monitoring program conducted pursuant to the license conditions established by the Department for the site or facility.
- Subsection 13. Litter Control. Litter control devices, such as portable wind abatement fences, close to disposal operations shall be provided in addition to the perimeter fence.
- Subsection 14. Recycling. If applicable, containers for the purpose of collecting of separated recyclable materials, including but not limited to, glass, aluminum, ferrous, corrugated paper, newspaper materials and used crankcase oil. The containers are subject to approval by the Department.

**B.05 Operation Requirements.** The permittee shall operate demolition waste facilities and provide evidence of such operation pursuant to the following procedures:

- Subsection 1. Burning. Open burning of demolition waste is prohibited.
- Subsection 2. Scavenging. Unauthorized removal of waste materials is prohibited.
- Subsection 3. Recycling. Recycling shall be allowed only if specifically set forth in the application and license and then only if recycled materials are removed daily from the premises or placed in an approved device or building.
- Subsection 4. Litter. The permittee shall keep the site and areas along public and private access roads free of litter, and permittee shall prevent litter from blowing onto and accumulating on real property adjacent to the facility.

- Subsection 5. Nuisances. The permittee shall prevent or eliminate any public nuisance by the control of vectors, such as rodents and flies, and of odors, dust, windblown material and other potential public health nuisances. Should the Department so prescribe, the permittee shall engage a pest control company licensed by the State of Minnesota to inspect the facility and perform any necessary pest eradication. The permittee shall send a copy of each inspection report to the Department within five (5) days of its receipt by the permittee.
- Subsection 6. Alterations and additions. The permittee shall make no alterations or additions affecting the construction of operational requirements of the waste facility without the written consent of the Department.
- Subsection 7. Supervision. A state certified attendant shall be on duty at the waste facility at all time while it is open for public use and shall continuously supervise the unloading of refuse at the unloading area.
- Subsection 8. Ingress-Egress. The permittee shall control all incoming and outgoing traffic in such a manner as to provide orderly and safe ingress and egress.
- Subsection 9. Records. The permittee shall maintain in a manner acceptable to the Department, accurate daily records containing information pertinent to the facility operation. The permittee shall allow the Department and its designated agents access to said records for review and inspection at any reasonable time. Daily records shall include the intake of solid waste measured in tons or cubic yards and general areas in which a particular type of solid waste is disposed.
- Subsection 10. Animal Feeding. Prohibit animal feeding within the site.
- Subsection 11. Bedrock and Water Table. Deposit solid waste at least five (5) feet above the highest known water table and at least five (5) feet above bedrock.
- Subsection 12. Property Line. Maintain minimum separating distance of two hundred (200) feet between the disposal operation and adjacent property line.
- Subsection 13. Working Face. Permit unloading of demolition waste in as small an area as practicable. The permittee shall confine wind blown materials to this area. At the conclusion of each day of operation, the permittee shall collect wind blown material and return it to the area.

- Subsection 14. Water Management. Divert surface water drainage around the landfill operating area, and provide management practices to protect surface water and groundwater. The permittee shall use leachate collection and treatment systems where required and approved by the Department.
- Subsection 15. Accepted Wastes. The Permittee shall accept only demolition and/or construction waste unless approved by the Department and the MPCA.
- Subsection 16. Areas Prohibited for Disposal. Fill and trench areas are prohibited within the following regions:
- a. Shoreland.
  - b. Flood plain.
  - c. Wetlands.
- Subsection 17. Gas migration. The permittee shall not allow decomposition gases to migrate laterally from the facility. The permittee shall vent gases directly into the atmosphere through the cover material or into cut-off trenches, or into the atmosphere by forced ventilation or by other means approved by the Department so that explosive concentrations are prevented.
- Subsection 18. Final Cover. Within one month after an area of the facility has reached final elevation, or after operations in an area have ceased, or after any continuous, unbroken area of approximately two (2) acres of a continuing operation is brought to final elevation, the area shall receive final cover application of at least two (2) feet of cover material and one-half foot of topsoil. Each six-inch lift of the final cover shall be separately compacted, graded until smooth and shaped to allow surface water runoff. No holes or depressions which might result in collection of surface water shall remain or exist after such covering.
- Subsection 19. Vegetation. The permittee shall cover the final cover of the filled area with adequate top soil and be seeded with suitable vegetation immediately upon completing of final cover application, or immediately in the spring on areas finished during winter conditions. The permittee shall cover seeded slopes with mats, straw or mulching material to prevent erosion, and shall use appropriate seeding, turf development and turf maintenance practices in order to establish adequate turf.

Subsection 20.      **Compaction and Cover.** The permittee shall compact the wastes as densely as practicable, shall cover wastes with a minimum of six (6) inches of compacted, suitable cover material on at least a weekly basis or as specified by the Department and shall maintain all filled areas with at least six (6) inches of cover material.

## **APPENDIX C: INCINERATOR FACILITIES**

**C.01 Scope.** In addition to parts C.02-5, all Incinerator facilities shall meet all of the requirements of Minnesota Rules, Chapter 7005 and 7035.

**C.02 Applicability.** This section shall apply to all persons seeking a permit to operate a Waste Facility for the processing of Solid Waste after collection and prior to ultimate disposal. This section applies only to existing and new incinerators having a capacity greater than 6,000 pounds per hour of mixed municipal solid waste and those for incineration of non-toxic or non-Hazardous Wastes. All incinerators shall be designed and operated in a manner to conform to emission limitations of state and local air pollution control regulations.

**C.03 Permit Requirements.** The applicant shall submit a complete set of plans, specifications and reports prepared by a Registered Professional Engineer under the laws of the State of Minnesota. The applicant shall furnish:

Subsection 1.      **Existing Conditions Plan.** A current map and aerial photograph of the area showing land use and zoning within one-fourth (¼) mile of the waste site or facility. The map and aerial photograph shall be of sufficient scale to show all homes, buildings, lakes, ponds, watercourses, wetlands, dry runs, rock outcroppings, roads and other applicable details as determined by the department, and shall include the general topography with contours and drainage patterns. The location of wells shall be identified on the map. United States Geological Survey datum shall be included and a north arrow drawn. A locational insert shall be included.

Subsection 2.      **Plot Plan.** A plot plan, including a legal description of the site and adjacent area, showing dimensions, location of soil borings, present and planned features, including, but not limited to roads, fencing, cover stockpiles, special construction materials and techniques, screening and monitoring points if planned for. The scale of the plot plan shall not be greater than 200 feet per inch.

- Subsection 3. Plans and Specifications. A set of plans and specifications clearly indicating the construction which will be undertaken. These details shall include a plot plan showing land use, zoning, and the location, type and height of all building within 500 feet of the proposed installation.
- Subsection 4. Final Contour Plan. An ultimate land use plan, identifying the total and complete land use, and showing finished contour lines and elevations. The scale of the ultimate land use plan shall not be greater than 200 feet per inch.
- Subsection 5. Report. A report indicating:
1. Geographical areas expected to be served by the proposed site, current population of the areas, and projected population figures for the period of the expected life of the facility.
  2. The anticipated type, quantity and source of material to be processed or disposed of at the site.
  3. The type and amount of equipment to be provided at the site for waste handling.
  4. The area of the site in acres.
  5. The name and address of the owner of the site or facility, and the name and address of individuals responsible for actual operation and maintenance of the site.
  6. The intended operating procedures.
  7. An estimate of the number of vehicles using the facility each day and the volume of solid waste deposited daily.
  8. Furnace design criteria and expected performance data, the present and future population and area to be served by the incinerator, and the characteristics, quantities and sources of solid waste to be incinerated.
  9. The intended disposal area for any incinerator residue.

- Subsection 6. Contingency Plans. Plans for the emergency disposal of solid waste in the event of major incinerator plant breakdown.
- Subsection 7. Additional Data. Such additional clarifying data as may be requested by the Department.

**C.04 Construction Requirements.** The permittee of any solid waste incinerator facility shall establish and/or provide evidence of the following:

- Subsection 1. Comfort. Sanitary Facilities and shelters for site personnel.
- Subsection 2. Electricity. Electrical services for operations and repairs.
- Subsection 3. Fire Protection. The permittee shall arrange for fire protection services and may be required to provide written evidence of such agreement to the Department.
- Subsection 4. First Aid. Emergency first aid equipment to provide adequate treatment of accidents.
- Subsection 5. Water. A potable water supply for facility personnel.
- Subsection 6. Telephone. A telephone in working condition.
- Subsection 7. Access. A fence and gate both at least six (6) feet high that shall be locked when the attendant is not on duty.
- Subsection 8. Ingress-Egress. A road to the unloading area maintained in good condition so that it will be passable at all times.
- Subsection 9. Sign. A sign at the entrance to the facility stating the name of the facility, the schedule of days and hours the facility is open to the public, a statement that dumping or operation at any hours other than what is stated is unlawful, prices for use of the facility, the agency permit number and, if applicable, a statement and symbol indicating that recyclable materials are accepted for recycling. The Department shall approve the sign and its placement prior to licensing.
- Subsection 10. Equipment. Equipment sufficient to conduct applicable operations and sufficient reserve equipment or written agreements to immediately provide for equipment during periods of breakdown.
- Subsection 11. Minimal Interference with Other Activities. The incinerator plant shall be so situated, equipped and maintained as to minimize interference with other activities in the area.

- Subsection 12. Unloading. Adequate holding bin capacity shall be provided for all incoming solid waste to be incinerated.
- Subsection 13. Dust Control. Facilities shall be designed to provide for dust control in the unloading and charging areas.
- Subsection 14. Weighing Facilities. The incinerator plant shall have weighing facilities available.
- Subsection 15. Emergency Communication. Adequate communication facilities shall be provided for emergency purposes.
- Subsection 16. Cleaning Equipment. Equipment shall be provided in the storage and charging areas and elsewhere as needed to allow cleaning after each day of operation or as may be required in order to maintain the plant in a sanitary condition.
- Subsection 17. Safety Equipment. The charging openings as well as all equipment throughout the plant shall be provided with safety equipment.
- Subsection 18. Combustion Temperature. During normal operation, the temperature in the combustion chambers shall conform to Chapter 7005 and other Air Pollution control Regulations of the Minnesota Pollution Control Agency, to produce a satisfactory residue and to result in an odor-free operation.
- Subsection 19. Temperature Monitoring and Records. A continuously recording pyrometer shall be provided in order to maintain continuous records of temperature in the combustion chambers.
- Subsection 20. Inspection. Upon completion of the plant and prior to initial operation, the Department shall be notified to allow personnel of the Department to inspect the plant both prior to and during the performance tests.
- Subsection 21. Performance Testing. Performance tests of the plant shall be required and supplied to the Department before full operation commences. A report covering the results of the performance tests in such cases shall be prepared by the design engineer of the project and submitted to the Department with a copy of all supporting data.

**C.05 Operation Requirements.** The permittee shall operate solid waste incinerator facilities pursuant to the following procedures:

- Subsection 1. Burning. Open burning of solid waste is prohibited.

- Subsection 2. Scavenging. Unauthorized removal of waste materials is prohibited.
- Subsection 3. Recycling. Recycling shall be allowed only if specifically set forth in the application and license and then only if recycled materials are removed daily from the premises or placed in an approved device or building.
- Subsection 4. Litter. The permittee shall keep the site and areas along public and private access roads free of litter, and permittee shall prevent litter from blowing onto and accumulating on real property adjacent to the facility.
- Subsection 5. Nuisances. The permittee shall prevent or eliminate any public nuisance by the control of vectors, such as rodents and flies, and of odors, dust, windblown material and other potential public health nuisances. Should the Department so prescribe, the permittee shall engage a pest control company licensed by the State of Minnesota to inspect the facility and perform any necessary pest eradication. The permittee shall send a copy of each inspection report to the Department within five (5) days of its receipt by the permittee.
- Subsection 6. Alterations and additions. The permittee shall make no alterations or additions affecting the construction or operational requirements of the waste facility without the written consent of the Department.
- Subsection 7. Supervision. A state certified attendant shall be on duty at the waste facility at all times while it is open for public use and shall continuously supervise the unloading of refuse at the unloading area.
- Subsection 8. Ingress-Egress. The permittee shall control all incoming and outgoing traffic in such a manner as to provide orderly and safe ingress and egress.
- Subsection 9. Records. The permittee shall maintain in a manner acceptable to the Department, accurate daily records containing information pertinent to the facility operation. The permittee shall allow the Department and its designated agents access to said records for review and inspection at any reasonable time.
- Subsection 10. Minimal Interference with Other Activities. The incinerator plant shall be so operated as to minimize interference with other activities in the area.

- Subsection 11. Information Display. A permanent sign shall be posted at the site entrance identifying the operation and showing the Minnesota Pollution Control Agency permit number of the plant, and indicating the hours and days when the plant is open for public use. Access to the plant shall be limited to those times when authorized personnel are on duty.
- Subsection 12. Unloading. All incoming solid waste to be incinerated at the plant shall be confined to the unloading area.
- Subsection 13. Weighing Facilities. Permanent records shall be maintained indicating the type and total weight or volume of material incinerated, the total quantity of resulting residues and total hours of plant operation. These records shall be available for inspection upon request by the Department.
- Subsection 14. Fire Protection. Arrangements shall be made with the local fire protection agency to provide fire fighting forces in an emergency.
- Subsection 15. Emergency Communication. Adequate communication facilities shall be provided for emergency purposes.
- Subsection 16. Cleaning Equipment. Equipment shall be provided in the storage and charging areas and elsewhere as needed to allow cleaning after each day of operation or as may be required in order to maintain the plant in a sanitary condition.
- Subsection 17. Safety Equipment. The charging openings as well as all equipment throughout the plant shall be provided with safety equipment.
- Subsection 18. Combustion Temperature. During normal operation, the temperature in the combustion chambers shall conform to Chapter 7005 and other Air Pollution Control Regulations of the Minnesota Pollution Control Agency, to produce a satisfactory residue and to result in an odor-free operation.
- Subsection 19. Temperature Monitoring and Records. A continuously recording pyrometer shall be provided in order to maintain continuous records of temperature in the combustion chambers. A copy of such records shall be available from the Department upon request.
- Subsection 20. Residue (Ash) Disposal. All residue removed from the incinerator plant shall be promptly disposed of in a manner that will prevent nuisances, pollution, public health hazards, and be in compliance with all state regulatory requirements. Residue must be disposed of in a permitted and licensed facility. Residue containing combustible material shall be disposed of in a sanitary landfill.

## APPENDIX D: MMSW PROCESSING FACILITIES

**D.01 Scope.** Any composting, co-composting, or refuse derived fuel facility shall be constructed, established, maintained and operated in accordance with the following provisions.

**D.02 Applicability.** This section shall apply to all persons seeking a permit to operate a Waste Facility for the processing of Solid Waste after collection and prior to ultimate disposal. This section applies only to existing and new composting and co-composting facilities.

**D.03 Permit Requirements.** The applicant shall submit a complete set of plans, specifications and reports prepared by a Registered Professional Engineer under the laws of the State of Minnesota. The applicant shall furnish:

- Subsection 1. Existing Conditions Plan. A current map and aerial photograph of the area showing land use and zoning within one-fourth (¼) mile of the waste site or facility. The map and aerial photograph shall be of sufficient scale to show all homes, buildings, lakes, ponds, watercourses, wetlands, dry runs, rock outcroppings, roads and other applicable details as determined by the department, and shall include the general topography with contours and drainage patterns. The location of wells shall be identified on the map. United States Geological Survey datum shall be included and a north arrow drawn. A locational insert shall be included.
- Subsection 2. Plot Plan. A plot plan, including a legal description of the site and adjacent area, showing dimensions, location of soil borings, present and planned features, including, but not limited to roads, fencing, cover stockpiles, special construction materials and techniques, screening and monitoring points if planned for. The scale of the plot plan shall not be greater than 200 feet per inch.
- Subsection 3. Plans and Specifications. A set of plans and specifications clearly indicating the construction which will be undertaken. These details shall include a plot plan showing land use, zoning, and the location, type and height of all building within 500 feet of the proposed installation.
- Subsection 4. Final Contour Plan. An ultimate land use plan, identifying the total and complete land use, and showing finished contour lines and elevations. The scale of the ultimate land use plan shall not be greater than 200 feet per inch.
- Subsection 5. Report. A report indicating:

1. Geographical areas expected to be served by the proposed site, current population of the areas, and projected population figures for the period of the expected life of the facility.
2. The anticipated type, quantity and source of material to be processed or disposed of at the site.
3. The type and amount of equipment to be provided at the site for waste handling.
4. The area of the site in acres.
5. The name and address of the owner of the site or facility, and the name and address of individuals responsible for actual operation and maintenance of the site.
6. The intended operating procedures.
7. An estimate of the number of vehicles using the facility each day and the volume of solid waste deposited daily.
8. Composting facility design criteria, the present and future population and area to be served by the facility, and the characteristics, quantities and sources of solid waste to be processed.

Subsection 6. Contingency Plans. Plans for the emergency disposal of solid waste in the event of the composting facilities closure or breakdown.

Subsection 7. Additional Data. Such additional clarifying data as may be requested by the Department.

**D.04 Construction Requirements.** The permittee of any solid waste composting or co-composting facility shall establish and/or provide evidence of the following:

Subsection 1. Comfort. Sanitary Facilities and shelters for site personnel.

Subsection 2. Electricity. Electrical services for operations and repairs.

Subsection 3. Fire Protection. The permittee shall arrange for fire protection services and may be required to provide written evidence of such agreement to the Department.

Subsection 4. First Aid. Emergency first aid equipment to provide adequate treatment of accidents.

- Subsection 5. Water. A potable water supply for facility personnel.
- Subsection 6. Telephone. A telephone in working condition.
- Subsection 7. Access. A fence and gate both at least six (6) feet high that shall be locked when the attendant is not on duty.
- Subsection 8. Ingress-Egress. A road to the unloading area maintained in good condition so that it will be passable at all times.
- Subsection 9. Sign. A sign at the entrance to the facility stating the name of the facility, the schedule of days and hours the facility is open to the public, a statement that dumping or operation at any hours other than what is stated is unlawful, prices for use of the facility, the agency permit number and, if applicable, a statement and symbol indicating that recyclable materials are accepted for recycling. The Department shall approve the sign and its placement prior to permitting.
- Subsection 10. Equipment. Equipment sufficient to conduct applicable operations and sufficient reserve equipment or written agreements to immediately provide for equipment during periods of breakdown.
- Subsection 11. Minimal Interference with Other Activities. The Composting facility shall be so situated, equipped and maintained as to minimize interference with other activities in the area.
- Subsection 12. Shelter and Sanitation. Shelter and sanitary facilities shall be available in the area.
- Subsection 13. Unloading. Adequate holding bin capacity shall be provided for all incoming solid waste.
- Subsection 14. Dust Control. Facilities shall be designed to provide for dust control in the loading and unloading areas, and throughout the facilities.
- Subsection 15. Weighing Facilities. The Composting facility shall have weighing facilities available.
- Subsection 16. Emergency Communication. Adequate communication facilities shall be provided for emergency purposes.
- Subsection 17. Cleaning Equipment. Equipment shall be provided in the storage and charging areas and elsewhere as needed to allow cleaning after each day of operation or as may be required in order to maintain the plant in a sanitary condition.

- Subsection 18. Safety Equipment. The loading and unloading areas as well as all equipment throughout the facilities shall be provided with safety equipment.
- Subsection 19. Road Construction and General Landscaping. Roads on the premises shall be all-weather surfaced. The premises shall be constructed and landscaped in such a manner as to be aesthetically pleasing in appearance.
- Subsection 20. Inspection. Upon completion of the facilities and prior to initial operation, the Department shall be notified to allow personnel of the Department to inspect the facilities.

**D.05 Operation Requirements.** The permittee shall operate solid waste incinerator facilities pursuant to the following procedures:

- Subsection 1. Burning. Open burning of solid waste is prohibited.
- Subsection 2. Scavenging. Unauthorized removal of waste materials is prohibited.
- Subsection 3. Recycling. Recycling shall be allowed only if specifically set forth in the application and license and then only if recycled materials are removed daily from the premises or placed in an approved device or building.
- Subsection 4. Litter. The permittee shall keep the site and areas along public and private access roads free of litter, and permittee shall prevent litter from blowing onto and accumulating on real property adjacent to the facility.
- Subsection 5. Nuisances. The permittee shall prevent or eliminate any public nuisance by the control of vectors, such as rodents and flies, and of odors, dust windblown material and other potential public health nuisances. Should the Department so prescribe, the permittee shall engage a pest control company licensed by the State of Minnesota to inspect the facility and perform any necessary pest eradication. The permittee shall send a copy of each inspection report to the Department within five (5) days of its receipt by the permittee.
- Subsection 6. Alterations and additions. The permittee shall make no alterations or additions affecting the construction of operational requirements of the waste facility without the written consent of the Department.
- Subsection 7. Supervision. A state certified attendant shall be on duty at the waste facility at all time while it is open for public use and shall continuously supervise the unloading of refuse at the unloading area.

- Subsection 8. Ingress-Egress. The permittee shall control all incoming and outgoing traffic in such a manner as to provide orderly and safe ingress and egress.
- Subsection 9. Records. The permittee shall maintain in a manner acceptable to the Department, accurate daily records containing information pertinent to the facility operation. The permittee shall allow the Department and its designated agents access to said records for review and inspection at any reasonable time. As a minimum, the permittee shall maintain records indicating the type and quantity of solid waste passing through the facilities.
- Subsection 10. Minimal Interference with Other Activities. The Composting Facilities shall be so operated as to minimize interference with other activities in the area.
- Subsection 11. Information Display. A permanent sign shall be posted at the site entrance identifying the operation and showing the Minnesota Pollution Control Agency permit number of the plant, and indicating the hours and days when the plant is open for public use. Access to the plant shall be limited to those times when authorized personnel are on duty.
- Subsection 12. Unloading. All incoming solid waste and solid waste being processed at the facilities shall be handled in such a manner as to eliminate odor and litter outside the facilities.
- Subsection 13. Weighing Facilities. Permanent records shall be maintained indicating the type and total weight or volume of material processed, the total hours of plant operation. These records shall be available for inspection upon request by the Departments.
- Subsection 14. Fire Protection. Arrangements shall be made with the local fire protection agency to provide fire fighting forces in an emergency.
- Subsection 15. Emergency Communication. Adequate communication facilities shall be provided for emergency purposes.
- Subsection 16. Cleaning equipment. Equipment shall be provided in the loading/unloading areas and elsewhere as needed to allow cleaning after each day of operation or as may be required in order to maintain the plant in a sanitary condition.

Subsection 17. Waste Removal and Clean-Up. When stated in and as a part of the permit, the permittee shall take away all Solid Waste, wash, clean and disinfect the station at the end of each day or use.

Subsection 18. Safety Equipment. The loading and unloading areas as well as all equipment throughout the plant shall be provided with safety equipment.

#### **APPENDIX E: RECYCLING FACILITIES**

**E.01 Scope.** The owner or operator of a facility designed to recycle material separated from the solid waste stream must obtain a permit from the County and comply with parts E.03 to E.06. A dropoff recycling facility operated by schools, volunteers, and charitable groups accepting source separated wastes in quantities less than ten cubic yards per day must comply with parts E.02, E.03 and E.04, C, and do not need to obtain a permit.

**E.02 Notification.** A letter of notification shall be submitted by the responsible person from a school, volunteer, or charitable group that operates a dropoff recycling facility to the solid waste officer within 30 days after the effective date of this part, indicating the existence of the recycling facility and describing the materials intended to be handled at the facility. The responsible person from a school, volunteer, or charitable group establishing a new recycling facility shall submit a letter of notification to the solid waste officer prior to beginning facility operations.

**E.03 Design requirements.** The owner or operator of a recycling facility must design and construct the facility in a manner that prevents surface water drainage through recyclable or unusable material, contains any spills or releases that could harm human health or cause environmental risks, and provides storage of recyclable materials and residuals. Storage of waste on-site must comply with Appendix G. In addition to the above basic requirements, the applicant will provide the County with the following information:

**A. Site Information**

1. An existing conditions map showing adjacent areas and their use (1/2 block for city property and 1/4 mile for rural property)
2. A site plan of the property showing the location of all buildings, vehicle storage areas, drainage patterns, etc., on the site.
3. All services offered in conjunction with the recycling facility.

**B. Operational information**

1. Materials accepted for recycling
2. Hours of operation
3. Site access and control.
4. Litter prevention.
5. The manner in which volume records are kept and will be reported to the County.
6. Any contracts/agreements with a second party to market the recyclables.

**E.04. Operation.** The owner or operator of a recycling facility must comply with the operation requirements of items A to C.

- A. The facility must be operated in a manner that minimizes dust and other windblown material, vermin populations due to improper storage, and other nuisance conditions.
- B. All residual waste must be removed at least once a week.
- C. By April 1 of each year, an annual report shall be submitted to the solid waste officer indicating the type and volume of materials handled at the facility; and the final markets and locations for the materials. Interim reports will be provided at the request of the County.
- D. For a facility that accepts major appliances for recycling, the facility must be registered with the MPCA and the U.S. Environmental Protection Agency as a hazardous waste generator. The facility must have equipment capable of removing and storing freon from those units which contain freon. The facility must also remove any material (capacitors, mercury switches, etc.) which are listed as hazardous waste by the State of Minnesota and insure that these materials are disposed of according to the State and Federal regulations.

**E.05. Contingency action plan.** The owner or operator of a recycling center must prepare and maintain a contingency action plan for that facility. The plan must discuss what actions will be taken if a fire, spill, or release occurs at the facility and what backup system exists if the facility is closed for any period of time.

**E.06. Closure.** The owner or operator of a recycling facility must properly remove and treat or dispose of all waste and contaminated soil or structures at the time of closure.

## APPENDIX F: TRANSFER STATION FACILITIES

**F.01 Scope.** Any transfer station facility shall be constructed, established, maintained and operated in accordance with the following provisions.

**F.02 Applicability.** This section shall apply to all persons seeking a permit to operate a Waste Facility for the transfer of Solid Waste after collection and prior to ultimate disposal. This section applies to existing and new transfer facilities. This section does not apply to canister systems. For the purpose of this Appendix, the location at which waste is transferred from one collection vehicle to another for the purpose of compliance with road weight restrictions or problems with vehicle access, and does not transfer more than 30 cubic yards of waste is not considered a transfer station.

**F.03 Permit Requirements.** The applicant shall submit a complete set of plans, specifications and reports prepared by a Registered Professional Engineer under the laws of the State of Minnesota. The applicant shall furnish:

- Subsection 1. Existing Conditions Plan. A current map and aerial photograph of the area showing land use and zoning within one-fourth ( $\frac{1}{4}$ ) mile of the waste site or facility. The map and aerial photograph shall be of sufficient scale to show all homes, buildings, lakes, ponds, watercourses, wetlands, dry runs, rock outcroppings, roads and other applicable details as determined by the department, and shall include the general topography with contours and drainage patterns. The location of wells shall be identified on the map. United States Geological Survey datum shall be included and a north arrow drawn. A locational insert shall be included.
- Subsection 2. Plot Plan. A plot plan, including a legal description of the site and adjacent area, showing dimensions, location of soil borings, present and planned features, including, but not limited to roads, fencing, cover stockpiles, special construction materials and techniques, screening and monitoring points if planned for. The scale of the plot plan shall not be greater than 200 feet per inch.
- Subsection 3. Plans and Specifications. A set of plans and specifications clearly indicating the construction which will be undertaken. These details shall include a plot plan showing land use, zoning, and the location, type and height of all building within 500 feet of the proposed installation.

Subsection 4. Final Contour Plan. An ultimate land use plan, identifying the total and complete land use, and showing finished contour lines and elevations. The scale of the ultimate land use plan shall not be greater than 200 feet per inch.

Subsection 5. Report. A report indicating:

1. Geographical areas expected to be served by the proposed site, current population of the areas, and projected population figures for the period of the expected life of the facility.
2. The anticipated type, quantity and source of material to be processed or disposed of at the site.
3. The type and amount of equipment to be provided at the site for waste handling.
4. The area of the site in acres.
5. The name and address of the owner of the site or facility, and the name and address of individuals responsible for actual operation and maintenance of the site.
6. The intended operating procedures.
7. An estimate of the number of vehicles using the facility each day and the volume of solid waste deposited daily.
8. Recycling facility design criteria and the present and future population and area to be served by the recycling facility, and the characteristics, quantities and sources of solid waste to be processed.

Subsection 6. Contingency Plans. Plans for the disposal of solid waste in the event of the recycling facility or transfer vehicles closure or breakdown.

Subsection 7. Additional Data. Such additional clarifying data as may be requested by the Department.

**F.04 Construction Requirements.** The permittee of any solid waste Transfer Facility shall establish and/or provide evidence of the following:

Subsection 1. Comfort. Sanitary Facilities and shelters for site personnel.

- Subsection 2. Electricity. Electrical services for operations and repairs.
- Subsection 3. Fire Protection. The permittee shall arrange for fire protection services and may be required to provide written evidence of such agreement to the Department.
- Subsection 4. First Aid. Emergency first aid equipment to provide adequate treatment of accidents.
- Subsection 5. Water. A potable water supply for facility personnel.
- Subsection 6. Telephone. A telephone in working condition.
- Subsection 7. Access. A fence and gate both at least six (6) feet high that shall be locked when the attendant is not on duty.
- Subsection 8. Ingress-Egress. A road to the unloading area maintained in good condition so that it will be passable at all times.
- Subsection 9. Sign. A sign at the entrance to the facility stating the name of the facility, the schedule of days and hours the facility is open to the public, a statement that dumping or operation at any hours other than what is stated is unlawful, prices for use of the facility, the agency permit number and, if applicable, a statement and symbol indicating that recyclable materials are accepted for recycling. The Department shall approve the sign and its placement prior to permitting.
- Subsection 10. Equipment. Equipment sufficient to conduct applicable operations and sufficient reserve equipment or written agreements to immediately provide for equipment during periods of breakdown.
- Subsection 11. Minimal Interference with Other Activities. The Transfer Station Facilities shall be so situated, equipped and maintained as to minimize interference with other activities in the area.
- Subsection 12. Shelter and Sanitation. Shelter and sanitary facilities shall be available in the area.
- Subsection 13. Unloading. Adequate holding bin capacity shall be provided for all incoming solid waste.
- Subsection 14. Dust Control. Facilities shall be designed to provide for dust control in the loading and unloading areas.

- Subsection 15. Weighing Facilities. The transfer station facilities shall have weighing facilities available if required by the Department.
- Subsection 16. Emergency Communication. Adequate communication facilities shall be provided for emergency purposes.
- Subsection 17. Cleaning Equipment. Equipment shall be provided in the storage and charging areas and elsewhere as needed to allow cleaning after each day of operation or as may be required in order to maintain the plant in a sanitary condition.
- Subsection 18. Safety Equipment. The loading and unloading areas as well as all equipment throughout the facilities shall be provided with safety equipment.
- Subsection 19. Road Construction and General Landscaping. Roads on the premises shall be all-weather surfaced. The premises shall be constructed and landscaped in such a manner as to be aesthetically pleasing in appearance.
- Subsection 20. Inspection. Upon completion of the facilities and prior to initial operation, the Department shall be notified to allow personnel of the Department to inspect the facilities.

**F.05 Operation Requirements.** The permittee shall operate solid waste transfer station facilities pursuant to the following procedures:

- Subsection 1. Burning. Open burning of solid waste is prohibited.
- Subsection 2. Scavenging. Unauthorized removal of waste materials is prohibited.
- Subsection 3. Recycling. Recycling shall be allowed only if specifically set forth in the application and permit and then only if recycled materials are removed daily from the premises or placed in an approved device or building.
- Subsection 4. Litter. The permittee shall keep the site and areas along public and private access roads free of litter, and permittee shall prevent litter from blowing onto and accumulating on real property adjacent to the facility.
- Subsection 5. Nuisances. The permittee shall prevent or eliminate any public nuisance by the control of vectors, such as rodents and flies, and of odors, dust windblown material and other potential public health nuisances. Should the Department so prescribe, the permittee shall engage a pest control company licensed by the State of Minnesota to inspect the

facility and perform any necessary pest eradication. The permittee shall send a copy of each inspection report to the Department within five (5) days of its receipt by the permittee.

- Subsection 6. Alterations and additions. The permittee shall make no alterations or additions affecting the construction of operational requirements of the waste facility without the written consent of the Department.
- Subsection 7. Supervision. A state certified attendant shall be on duty at the waste facility at all time while it is open for public use and shall continuously supervise the unloading of refuse at the unloading area.
- Subsection 8. Ingress-Egress. The permittee shall control all incoming and outgoing traffic in such a manner as to provide orderly and safe ingress and egress.
- Subsection 9. Records. The permittee shall maintain in a manner acceptable to the Department, accurate daily records containing information pertinent to the facility operation. The permittee shall allow the Department and its designated agents access to said records for review and inspection at any reasonable time. As a minimum, the permittee shall maintain records indicating the type and quantity of solid waste passing through the facilities.
- Subsection 10. Minimal Interference with Other Activities. The Transfer Station Facilities shall be so operated as to minimize interference with other activities in the area.
- Subsection 11. Information Display. A permanent sign shall be posted at the site entrance identifying the operation and showing the Minnesota Pollution Control Agency permit number of the plant, and indicating the hours and days when the plant is open for public use. Access to the plant shall be limited to those times when authorized personnel are on duty.
- Subsection 12. Unloading. All incoming solid waste to be transferred at the facilities shall be confined to the loading/unloading area and shall be conducted in such a manner as to eliminate odor and litter outside the facilities.
- Subsection 13. Fire Protection. Arrangements shall be made with the local fire protection agency to provide fire fighting forces in an emergency.
- Subsection 14. Emergency Communication. Adequate communication facilities shall be provided for emergency purposes.

- Subsection 15. Cleaning equipment. Equipment shall be provided in the loading/unloading areas and elsewhere as needed to allow cleaning after each day of operation or as may be required in order to maintain the plant in a sanitary condition.
- Subsection 16. Waste Removal and Clean-Up. When stated in and as a part of the permit, the permittee shall take away all Solid Waste, wash, clean and disinfect the station at the end of each day or use.
- Subsection 17. Safety Equipment. The loading and unloading areas as well as all equipment throughout the plant shall be provided with safety equipment.

#### **APPENDIX G: SOLID WASTE STORAGE**

**G.01 Scope.** Any solid waste storage facility shall be constructed, established, maintained and operated in accordance with the following provisions.

#### **G.02 Storage Classification.**

- Subsection 1. Solid Waste Accumulations. Owners and managers of every property shall be responsible for maintaining all open areas free of improperly stored solid waste accumulations. Except for accepted normal operation on farms, this includes removal of: (a) animal feces, brush piles, inoperable machines, appliances, fixtures, and equipment so damaged, deteriorated or obsolete as to have no substantial value and can be reasonably considered solid waste; (b) lumber piles and building materials unless being actively used by a business or construction requiring the use of such lumber and materials; (c) tin cans, broken glass, broken furniture, boxes, crates, and other debris; (d) and other form of mixed municipal solid waste. Nothing in this section is designed to restrict the commonly accepted activities of farms and duly established and licensed automobile, scrap iron, and metal recyclers and salvage operations.
- Subsection 2. Storage Facilities and Containers Required. Every property shall be supplied with adequate solid waste storage facilities and containers. Such facilities and containers shall be supplied by the owner of the property or by contract with a commercial hauler.
- Subsection 3. Provide Facilities Required to be Used. Property owners shall cause occupants and employees to store wastes for removal in the solid waste storage facilities and

containers provided. The property owner shall not permit solid waste to be placed in locations or in a manner that the solid waste can be scattered by water, wind, animals, or insects.

### **G.03 Methods of Storage.**

Subsection 1. Frequency of Container Services. Every property owner shall cause the container contents to be removed and deposited at a place allowed by this ordinance. Non-putrescible wastes suitable and sorted for recycling may be contained for more than ten (10) days if they are stored in an aesthetically acceptable manner that avoids unacceptable health risk or nuisances, and otherwise complies with this ordinance.

Subsection 2. Container Construction. All solid waste containers shall be constructed resistant to rodent, insect and vermin entry. Materials used shall be rust and impact resistant. The containers shall be equipped with tight-fitting covers that shield the container from the entrance of precipitation, rodents, insects, and vermin.

1. Manually serviced containers shall have tapered side walls and handles, and a capacity of not more than thirty-two (32) gallons, and shall not be loaded more than fifty-five (55) lbs.
2. Mechanically serviced containers designed, equipped, and located to be emptied or carried by mechanical means suitable for commercial hauler may be used with permission of the hauler.
3. Refuse Bins having an internal volume of one (1) cubic yard or greater shall be constructed or retrofitted to meet American National Standards Institute (ANSI) Standard (Z 245.3-1077) for the Stability of Refuse Bins.
4. Single use containers not meeting the above requirements may be used for Yard Waste provided the container is:
  - a. Constructed of moisture resistant materials.
  - b. Adequately designed to contain the waste.

- c. Closed to resist the entrance of water.
- d. Loaded no more than fifty-five (55) lbs.
- e. Strong enough to allow collection and loading by hand.

Subsection 3. Container Maintenance. Solid waste containers shall be maintained and kept in a neat, clean, sanitary, and leak-resistant condition by the container's owners to prevent insect breeding, nuisances, and unsightly conditions. Containers shall be maintained in good repair by the property holder or by the commercial hauler, when supplied by him.

Subsection 4. Solid Waste Burning Prohibited. Burning of Solid Waste shall be prohibited except (a) as allowed at a permitted Solid Waste Facility, (b) as allowed under the terms of a "Permit For Open Burning" issued by authority of the MPCA, (c) as allowed by Agency Rules.

#### **APPENDIX H: WASTE TIRE FACILITIES**

**H.01 Scope.** Any waste tire waste facility shall be constructed, established, maintained and operated in accordance with the following provisions.

**H.02 Applicability.** This section shall apply to all persons seeking a permit to operate a waste tire processing or collection site.

**H.03 Exceptions.** A permit shall not be required for the following:

Subsection 1. A retail tire seller for the retail selling site if no more than 500 waste tires are kept on the business premises.

Subsection 2. An owner or operator of a tire retreading business for the business site if no more that 3,000 waste tires are kept on the business premises.

Subsection 3. An owner or operator of a business who, in the ordinary course of business, removes tires from motor vehicles if no more than 500 waste tires are kept on the business premises.

Subsection 4. A permitted MMSW land disposal facility with less than 5,000 waste tires stored above ground at the permitted site.

Subsection 5. A person using waste tires for agricultural purposes if the waste tires are kept on the site of use and shall not

exceed 250 tires on-site unless special permission is granted by the Department.

**H.04 Permit Requirements.** The applicant shall submit three complete sets of plans, specifications and reports prepared by a Registered Professional Engineer under the laws of the State of Minnesota. The applicant shall furnish:

- Subsection 1. Existing Conditions Plan. A current map and aerial photograph of the area showing land use and zoning within one-fourth ( $\frac{1}{4}$ ) mile of the waste site or facility. The map and aerial photograph shall be of sufficient scale to show all homes, buildings, lakes, ponds, watercourses, wetlands, dry runs, rock outcroppings, roads and other applicable details as determined by the department, and shall include the general topography with contours and drainage patterns. The location of wells shall be identified on the map. United States Geological Survey datum shall be included and a north arrow drawn. A locational insert shall be included.
- Subsection 2. Plot Plan. A plot plan, including a legal description of the site and adjacent area, showing dimensions, location of soil borings, present and planned features, including, but not limited to roads, fencing, cover stockpiles, special construction materials and techniques, screening and monitoring points if planned for. The scale of the plot plan shall not be greater than 200 feet per inch.
- Subsection 3. Final Closure Plan. An ultimate land use plan, identifying the total and complete land use, and showing finished contour lines and elevations. The scale of the ultimate land use plan shall not be greater than 200 feet per inch.
- Subsection 4. Report. A report indicating:
1. Geographical areas expected to be served by the proposed site, current population of the areas, and projected population figures for the period of the expected life of the facility.
  2. The anticipated type, quantity and source of material to be processed or disposed of at the site.
  3. The type and amount of equipment to be provided at the site for waste handling.
  4. The area of the site in acres.

5. The name and address of the owner of the site or facility, and the name and address of individuals responsible for actual operation and maintenance of the site.
6. The intended operating procedures.
7. An estimate of the number of vehicles using the facility each day and the volume of solid waste deposited daily.

**H.05 Construction Requirements.** The permittee of any waste tire facility shall establish and/or provide evidence of the following:

- Subsection 1. Comfort. Sanitary Facilities and shelters for site personnel.
- Subsection 2. Electricity. Electrical services for operations and repairs.
- Subsection 3. Fire Protection. The permittee shall arrange for fire protection services and may be required to provide written evidence of such agreement to the Department.
- Subsection 4. First Aid. Emergency first aid equipment to provide adequate treatment of accidents.
- Subsection 5. Water. A potable water supply for facility personnel.
- Subsection 6. Telephone. A telephone in working condition.
- Subsection 7. Access. A fence and gate both at least six (6) feet high that shall be locked when the attendant is not on duty.
- Subsection 8. Ingress-Egress. A road to the unloading area maintained in good condition so that it will be passable at all times.
- Subsection 9. Sign. A sign at the entrance to the facility stating the name of the facility, the schedule of days and hours the facility is open to the public, a statement that dumping or operation at any hours other than what is stated is unlawful, prices for use of the facility, the agency permit number and, if applicable, a statement and symbol indicating that recyclable materials are accepted for recycling. The Department shall approve the sign and its placement prior to permitting.
- Subsection 10. Equipment. Equipment sufficient to conduct applicable operations and sufficient reserve equipment or written agreements to immediately provide for equipment during periods of breakdown.

**H.06 Operation Requirements.** The permittee shall operate waste tire facilities pursuant to the following procedures:

- Subsection 1. Burning. No operations involving the use of open flames, blow torches or highly flammable substances shall be conducted within 50 feet of a waste tire pile.
- Subsection 2. Scavenging. Unauthorized removal of waste materials is prohibited.
- Subsection 3. Litter. The permittee shall keep the site and areas along public and private access roads free of litter, and permittee shall prevent litter from blowing onto and accumulating on real property adjacent to the facility.
- Subsection 4. Nuisances. The permittee shall prevent or eliminate any public nuisance by the control of vectors, such as rodents and flies, and of odors, dust windblown material and other potential public health nuisances. Should the Department so prescribe, the permittee shall engage a pest control company licensed by the State of Minnesota to inspect the facility and perform any necessary pest eradication. The permittee shall send a copy of each inspection report to the Department within five (5) days of its receipt by the permittee.
- Subsection 5. Alterations and additions. The permittee shall make no alterations or additions affecting the construction of operational requirements of the waste facility without the written consent of the Department.
- Subsection 6. Supervision. An attendant shall be on duty at the waste facility at all time while it is open for public use and shall continuously supervise the unloading of refuse at the unloading area.
- Subsection 7. Ingress-Egress. The permittee shall control all incoming and outgoing traffic in such a manner as to provide orderly and safe ingress and egress.
- Subsection 8. Records. The permittee shall maintain in a manner acceptable to the Department, accurate daily records containing information pertinent to the facility operation. The permittee shall allow the Department and its designated agents access to said records for review and inspection at any reasonable time. As a minimum, the permittee shall maintain records indicating the type and quantity of solid waste passing through the facilities.

- Subsection 9. Acceptable Waste. The permittee shall accept only waste tires at the collection site.
- Subsection 10. Storage Area. The permittee shall prohibit piling of waste tires within the following regions:
1. Shoreland.
  2. Flood plain.
  3. Wetlands.
- Subsection 11. Tire Storage Requirements. The permittee shall:
1. Confine waste tires to as small an area as practicable with individual piles not more than 10,000 square feet in area and 20 feet in height.
  2. Provide a fifty foot wide perimeter fire lane and a minimum twelve foot separation between piles of waste tires to allow access for trucks and emergency vehicles. All fire lanes must be maintained free of rubbish and vegetation at all times.
  3. Provide trenching or other adequate measures to minimize the potential for fire spreading. Tires stored indoors must meet the National Fire Protection Association (NFPA) "Standard for Storage of Rubber Tires", Publication 231.D.
  4. Construct piles of waste tires to minimize accumulation of stagnant water in order to maintain the area free of rodents and to minimize mosquitos and other vectors.
- Subsection 12. Property Line. The permittee shall maintain a minimum separating distance of one-hundred (100) feet between the waste tires processing and collection site operations and the adjacent property line.
- Subsection 13. Water Management. The permittee shall divert surface waste drainage around and away from the collection area.
- Subsection 14. Screening. The permittee shall provide adequate visual screening to reduce visibility of above-grade operations from housing or public right-of-ways by use of natural objects, trees, plants, seeded soil berms, fences or other means deemed suitable by the Department.

**H.07 Waste Tire Reduction.** Waste tire processing and collection sites and tire dumps in existence prior to the effective date of the ordinance, shall

reduce the accumulation of waste tires by processing and/or marketing to amounts, within time limits established by the Department.

**H.08 Cessation of Operations.** Upon cessation of waste tire processing operations, the permittee, owner and operator shall be responsible for removing all waste tires and tire products from the site.

**APPENDIX I: COLLECTION AND TRANSPORTATION**

**I.01 Scope.** Any person who operates a service for the purpose of collecting and transporting solid waste and/or recyclables must maintain and operate the service in accordance with the following provisions. In addition to the following, the collection and transportation of solid waste shall meet all the requirements of Minnesota Rules, Chapter 7035.0800.

**I.02 Applicability.** This section shall apply to all persons seeking to operate a vehicle for transportation and/or collection of solid waste and/or recyclables within Le Sueur County. This section does not apply to those who transport materials that have been collected for recycling and are being transported from a permitted or registered recycling facility to a processing facility or market.

**I.03 Required Permits.** A vehicle transporting solid waste from a single household or a vehicle hauling solid waste from outside of Le Sueur County to another place outside of Le Sueur County is exempt from permit requirements. Vehicles that are transporting only recovered materials, concrete, brick, bituminous concrete, trees, or structural metals are also excluded from the requirements of this section unless these materials are being hauled to a solid waste management facility located within Le Sueur County. All other vehicles transporting solid waste within Le Sueur County shall possess one of the following permits:

Subsection 1.       Transportation Permit. Any person, firm or corporation that transports solid waste via highways and roads in Le Sueur County must obtain a Transportation Permit every two years.

Subsection 2.       Collection/Transportation Permit. Any person, firm, or corporation that collects solid waste within Le Sueur County and transports solid waste via highways and roads in Le Sueur County must annually obtain a Collection/Transportation Permit.

Subsections 3.     Permit Application. Application for Transportation and Collection/Transportation Permits shall be made upon forms provided by the Department.

#### **I.04 Transportation Permit Requirements.**

Subsection 1. Persons, firms or corporations intending to transport solid waste in Le Sueur County shall submit the following information:

1. The name and address of the applicant.
2. A description of each vehicle to be used for solid waste transportation, including the vehicle identification, make, model, year, the capacity of the body or the capacity and number of rollofs.
3. The date of the last State of Minnesota safety inspection of the vehicle.
4. The location and address describing the place where the applicant is storing his equipment/vehicle.
5. Current copy of certificate of insurance, indicating proper insurance coverage for the period of the permit, including the name of the insurance carrier, its agent, policy number, and effective dates.
6. The applicant shall submit a description of the route(s) to be followed by his Solid Waste collection and transportation vehicles during the collection and transportation of Solid Waste.
7. The estimated weekly weight of volume of solid waste transported. Including the destination of the solid waste.
8. A statement by the applicant that shows that he/she:
  - a. utilizes county designated routes
  - b. that vehicle operators possess proper Minnesota drivers licenses.
9. Other information the county may reasonably require including applicant's signature, and appropriate fees for the permit.

Subsection 2. Labeling. The permittee shall display a decal provided by the Department on a location on each vehicle specified by the Department. In addition, the permittee shall display name, address, and telephone number of the Collector on each side of the vehicle. Letters and numbers shall be at least three (3) inches high.

Subsection 3. Inspection. The Department may inspect and approve any Solid Waste Collection and transportation vehicles prior to giving approval.

#### **I.05 Collection/Transportation Permit Requirements.**

Subsection 1. Submittals. Persons, firms or corporations intending to collect and transport solid waste in Le Sueur County shall submit the following information:

1. The name and address of the applicant.
2. A description of each vehicle to be used for collection and solid waste transportation, including the vehicle identification, make, model, year, the capacity of the body or the capacity and number of rollofs.
3. The date of the last State of Minnesota safety inspection of the vehicle.
4. The location and address describing the place where the applicant is storing his equipment/vehicle.
5. Current copy of certificate of insurance, indicating proper insurance coverage for the period of the permit, including the name of the insurance carrier, its agent, policy number, and effective dates.
6. A map of the area of each city, township, and county served.
7. The applicant shall submit a description of the route(s) to be followed by his Solid Waste collection and transportation vehicles during the collection and transportation of Solid Waste. Include the destination of the solid waste.
8. On a form or forms provided by the Department, the applicant shall submit information to the Department regarding applicant's routes, type and quantity of waste collected, and such other information as the Department may require.
9. A copy of approvals if required by the governing body of any municipality to be served.
10. A statement by the applicant that shows that he/she:

- a. utilizes county designated routes
- b. that vehicle operators possess proper Minnesota drivers licenses.

Subsection 2. Labeling. The permittee shall display a decal provided by the Department on a location on each vehicle specified by the Department. In addition, the permittee shall display name, address, and telephone number of the Collector on each side of the vehicle. Letters and numbers shall be at least three (3) inches high.

Subsection 3. Inspection. The Department may inspect and approve any Solid Waste Collection and transportation vehicles prior to giving approval.

**I.06 Applicant Review.** After receiving a complete application, the Department shall submit the application to the Board at earliest convenient time and the Board shall have 30 days to either grant or deny the permit. If an applicant is not granted a permit he shall be notified in writing of the reasons therefore. Failure of the Board to act on an application within 30 days shall constitute a denial. A denial shall be without prejudice to the applicant's right to file a further application. Submission of false information may constitute ground for denying a permit or permit renewal, or suspension by revocation of an issued permit.

**I.07 Operation and Maintenance Requirements.**

Subsection 1. Equipment Requirements. All Solid Waste collection and transportation vehicles shall be easily cleanable, leak-proof, and be covered with metal, canvas, or fishnet type material made for this purpose.

Subsection 2. Maintenance. The permittee shall maintain all Solid Waste collection and transportation vehicles in a safe and sanitary manner, and provide brooms and shovels on each vehicle for the purpose of cleaning spilled material. All safety equipment including but not limited to horns, lights, reflectors shall be operable.

Subsection 3. Protection Private Property. The permittee shall take reasonable care to protect the property of customers being served. The permittee shall be responsible for any damage or spillage of Solid Waste as a result of his action.

Subsection 4. Smoking, Smoldering or Burning Waste. The permittee shall not collect and transport waste materials that are smoking, smoldering or burning.

Subsection 5. Dumping in an Emergency. The permittee shall be responsible for the cleanup of any waste that must be dumped in an emergency. The operator of the vehicle shall immediately notify the Department and the appropriate law enforcement agency and emergency service of such a dumping and clean the area within a time limit set by the Department.

#### **I.08 Volume of Weight Based Fees.**

Subsection 1. In accordance with Minnesota Statutes 115A.93, all fees for the collection of mixed municipal solid waste assessed by collectors operating within Le Sueur County shall be based on either a volume or weight based system. For volume or weight based fees, the fee shall increase, with the volume or weight of the waste collected. These fees shall be implemented no later than May 1, 1992 in municipalities, and January 1, 1994 in the unincorporated areas of the County.

Subsection 2. A pricing system based on volume instead of weight shall have a base unit size of 33 gallons, or less, for waste collected from households, waste collected from commercial/industrial collection may have a larger base unit size. In the event that a multiple unit pricing system is established, the waste generated in excess of the base unit shall be priced to reflect the actual difference in tip fees at the disposal facility used by the collector. For multiple unit pricing systems, the generator shall be able to change between the different systems within 60 days. The collector shall submit fees schedules to the Department for review to insure compliance with this Ordinance.

Subsection 3. Municipalities or Townships within Le Sueur County that contract with refuse collectors must contract only with a refuse collector who is licensed by Le Sueur County. Contracts must also be consistent with the provisions in this Ordinance.

Subsection 4. A municipality or township that collects charges for mixed municipal solid waste collection directly from waste generators shall implement charges consistent with Subsection 2 above.

Subsection 5. For the purpose of this section, farms are to be considered households for purposes of fee calculation.

## I.09 Recyclables Collection

- Subsection 1. Any person, firm, or corporation which collects refuse under authority of this ordinance must provide a service (either directly or through written subcontract with a person or company approved by Le Sueur County as a condition to the license) to collect recyclables curbside from all single family residential (which includes farm homes), multiple family residential, commercial and industrial customers in Le Sueur County. The recyclables to be collected shall include at least those materials accepted at the recycling facility which Waste Management of Le Sueur/St.Peter operates under contract with the TRI-County Joint Powers Board and the Counties of Le Sueur, Sibley, and Nicollet. This includes news paper, glass food and beverage containers, metal food and beverage containers, and number 1 & 2 plastics for residential customers and office paper and corrugated for commercial and industrial customers. Additional materials may be added to this list by Resolution of the County Board after the effective date of this Section. All licensed firms shall be given 120 days advance notice in writing of the proposed additional recyclable material(s) and shall be notified 15 calendar days in advance of the time and date of the County Board meeting at which time a decision will be rendered. Notice shall be deemed given by mail via general delivery to the address identified on the most recent license application or renewal form on file in the Department.
- A. The Refuse Collection Service may specify the type of container their customer must place the recyclables in. The containers must be provided by the Refuse Collection Service or already available to a customer at the time this Ordinance provision becomes effective.
  - B. The collection location must be on the customer's property in a location at or near the regular solid waste collection site or such location mutually agreeable to the hauler and the customer.
  - C. The Refuse Collection Service may specify how a customer is to place their recyclables out for collection and how the recyclables are to be prepared. The Department reserves the right to review and modify the amount of preparation required by the

Refuse Collection Service in consideration of local recyclable market requirements.

- D. The Refuse Collection Service must collect recyclables from each customer at least once a month unless normal solid waste collection service is provided less frequently than monthly, in which case the frequency of recyclable collection shall be the same as refuse collection.
- E. A Refuse Collection Service may not dispose of any recyclables in or on the land, nor through incineration unless given prior written approval to do so by the Department.
- F. Municipalities or Townships within Le Sueur County that contract for refuse collection service, must include recyclables collection as part of their contract. Municipalities or townships within Le Sueur County that provide refuse collection service directly, may provide an alternative recyclables collection method provided the alternative method collects recyclables quantities from their jurisdiction that are similar to recycling quantities collected by curbside programs in other Le Sueur County Municipalities or Townships.

Subsection 2. This Section shall take effect on February 1, 1993.

B. NICOLLET COUNTY ORDINANCE

**NICOLLET COUNTY**

**SOLID WASTE ORDINANCE**

An ordinance authorizing and providing for County Solid Waste Management, establishing powers and duties in connection therewith, establishing standards for and regulating solid waste management operations within the County of Nicollet, requiring a license for the establishment and operation of a solid waste management facility; establishing requirements for certain facilities on a disposal site; and for control of special solid wastes and for fire protection; embodying minimum standards and requirements established by regulation of the Minnesota Pollution Control Agency; providing for enforcement of said requirements; requiring a performance bond; and imposing penalties for failure to comply with these provisions; in purpose and object to promote the health, welfare and safety of the public and protect resources of water, air and land pursuant to Minnesota Statutes 1971, Chapter 115, 116, 400, and 403.

The County Board of Commissioners, of the County of Nicollet, hereinafter referred to as the County Board, does ordain:

**SECTION I. DEFINITIONS.** Unless specifically altered, terms and abbreviations used in this ordinance shall be interpreted in a manner consistent with Minnesota Statutes 1971, Chapters 115, 116, 400, and 403 and regulations of the Agency, which have been or hereafter may be adopted under those provisions. Terms and abbreviations used herein which are not specifically defined by law shall be construed in accordance with the context and professional usage.

Subd. 1. "Agency" means the Minnesota Pollution Control Agency. Created by Minnesota Statutes Section 116.02.

Subd. 2 "Air Contaminant" means the presence in the outdoor atmosphere of any gas, fumes, mist, vapor, gas or gaseous, fluid or particulate substance differing in composition from or exceeding in concentration the natural components of the atmosphere.

Subd. 3. "Air Pollution" means the presence in the outdoor atmosphere of any air contaminant or combination thereof in such quantity, of such nature and duration, and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property.

Subd. 4 "County" means any department or representative of

the County who is authorized by this ordinance or otherwise by the County Board to represent the County of Nicollet in the enforcement or administration of this ordinance.

- Subd. 5. "County Board" means the Board of County Commissioners of Nicollet County, Minnesota, or its duly appointed representative.
- Subd. 6. "Cover Material" is granular material, generally soil, which is used to cover compacted solid waste in a sanitary landfill, is generally free of large objects that would hinder compaction, and is free of organic content that would be conducive to vector harborage, feeding or breeding.
- Subd. 7. "Garbage" means material resulting from the handling, processing, storage, preparation, serving and consumption of food.
- Subd. 8. "Incineration" means the process by which solid wastes are burned for the purpose of volume and weight reduction in facilities designed for such use.
- Subd. 9. "Intermediate disposal facility" means a facility for the storage, reduction, recycling, or processing of solid wastes prior to final disposal.
- Subd. 10. "Land pollution" means the presence in or on the land of any solid waste in such quantity, of such nature or duration, and under such conditions as would affect injuriously any waters of the state, create air contaminants or cause air pollution.
- Subd. 11. "Licensee" means a person who has been issued a license by the County Board for solid waste management purposes pursuant to this ordinance. License and licensee shall be synonymous with Permit and Permittee.
- Subd. 12. "Liquid Waste" is inorganic refuse in a liquid or semi-liquid state such as sludge from automobile wash racks, mud and water from a laundry and pain sludge.
- Subd. 13. "Municipal Waste" is liquid or semi-liquid residue from municipal sewage disposal facilities.
- Subd. 14. "Operation" means any site, facility, or activity relating to solid waste management,

- Subd. 15. "Permit and Permittee" shall be synonymous with license and licensee, respectively.
- Subd. 16. "Person" means any human being, and municipality or any governmental or political subdivision or public agency, any public or corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, or any other legal entity.
- Subd. 17. "Putrescible Material" means solid waste which is capable of becoming rotten or which may reach a foul state of decay or decomposition.
- Subd. 18. "Refuse" means putrescible and non-putrescible solid wastes, including, but not limited to, garbage, rubbish, ashes, incinerator ash, incinerator, residue, street cleanings, market and industrial solid wastes, and sewage treatment wastes which are in a dry form.
- Subd. 19. "Sanitary Landfill" means an area of land which is or could be used for the disposal of solid waste without creating pollution of land, water or air, hazards to the public health or safety, or public nuisance, by utilizing the principles of engineering to confine the solid waste to the smallest practical volume, and to cover it with at least six inches of cover material at the conclusion of each day's operation, or at more frequent intervals as may be required by the Agency.
- Subd. 20. "Shoreland" means land located within the following distances from the ordinary high water elevation of public waters; (a) land within 1,000 feet from the normal high watermark of a lake, pond, or flowage; and (b) land within 300 feet of a river or stream or the landward side of flood plain delineated by ordinance on such a river or stream, whichever is greater.
- Subd. 21. "Solid Waste" means garbage, refuse, and other discarded solid material, except animal waste or animal carcasses used as fertilizer, including solid waste material resulting from industrial, commercial, agricultural operations, and community activities, but does not include earthen fill, boulders, rock and other material normally handled in construction operations, solids or dissolved material in domestic sewage or other significant pollutants in water resources, such as silt,

dissolved or wastewater effluent, dissolved materials, suspended solids in irrigation return flows, or other common water pollutants.

- Subd. 22. "Solid Waste Management" means the storage, collection and removal of solid waste from public and private property, its transportation to intermediate or final disposal facilities and its disposal by approved methods.
- Subd. 23. "Toxic and Hazardous Wastes" are waste material including but not limited to poisons, pesticides, herbicides, acids, caustics, pathological wastes, radioactive materials, flammable or explosive materials which, whether in liquid, gaseous or solid form, which when collected, stored transported or disposed of, may be acutely toxic to humans or other animals, or plant life, or be directly damaging to property.
- Subd. 24. "Transfer Station" means an intermediate solid waste disposal facility, whether fixed or mobile, in which solid waste collected from any source is temporarily deposited to await transportation to the final disposal site or facility.
- Subd. 25. "Water Pollution" means the contamination of any waters of the state so as to create a nuisance or render such waters unclean, obnoxious or impure, so as to be actually or potentially harmful or detrimental or injurious to public health, safety or welfare, to domestic, commercial or industrial use, or to animals, birds, fish or other aquatic life.
- Subd. 26. "Waters of the State" means all streams, lakes, ponds, marshes, water courses, waterways, wells, springs, reservoirs, aquifers, irrigation systems and all other bodies or accumulation of water surface or underground, natural or artificial, public or private, which are contained within, flow through or border upon the state or any portion thereof.

## **SECTION II. GENERAL PROVISIONS**

- Subd. 1. No person shall cause, permit, or allow, his land or property under his control to be used for solid waste management purposes, except at a site or facility for which a license has been granted by the County Board, unless otherwise provided by this ordinance. A license shall not be required under this ordinance for any site used for the disposal

of solid waste from only a single family or household, a member of which is the owner, occupant or lessee of the property, but such site shall be operated and maintained in a nuisance-free and aesthetic manner consistent with the intent of this ordinance.

- Subd 2. Any operation to be used for any method of solid waste management not otherwise provided for in this ordinance must be licensed by the County Board before operation may commence. The license application shall include sets of complete plans, specifications, design data, ultimate land use plan, if applicable, and proposed operating procedures prepared by a registered professional engineer of Minnesota. Where applicable, the applicant shall procure and accompany the application with a proper zoning permit if required by the County Zoning Ordinance.
- Subd. 3. After receiving an application for an operation, the County Board shall refer such application to the County Solid Waste Officer or any other person so designated to administer same, who shall give his recommendation to the County Board concerning whether it should issue or deny the license. If an applicant is denied a license, he shall be notified in writing of the reasons therefor by the County Board. A denial shall be without prejudice to the applicant's right to an appearance before the County Board or to his right to file a further application after revisions are made to satisfy objections specified as reasons for the dismissal.
- Subd. 4. The County Board shall refuse to issue a license for any operation which does not comply with this ordinance, Agency regulations and the County's solid waste management plan.
- Subd. 5. Unless otherwise provided by the County Board, issuance of any license pursuant to the provisions of this ordinance shall be contingent upon the applicant furnishing to the County a bond in an amount to be set by the County Board and naming the County as obligee with sufficient sureties duly licensed and authorized to transact business in the State of Minnesota as sureties. The condition of such bond shall be that if the principal fails to comply with any of the requirements or fails to perform any of the acts required of an operation or ceases to operate or abandons the operation, and the County is required to expend any monies or expend any labor or material to restore the

operation to a condition in compliance with this ordinance, the obligor and the sureties on its bond shall reimburse the County for any and all expenses incurred to remedy failure of the principal to comply with the terms of the ordinance, and the obligor and its sureties will indemnify and save the County harmless from all losses, costs and charges that may occur to the County because of any default of the obligor under the terms of his license to operate and the ordinances of the County.

Subd. 6. In addition to the bond to be furnished, the licensee shall furnish to the County certificates of insurance issued by insurers duly licensed within the State of Minnesota covering public liability insurance, including general liability, automobile liability, loading and unloading, completed operations liability, bodily injury liability in an amount of at least \$100,000.00 for injury or death of any one person in any one occurrence and aggregate bodily liability in an amount of at least \$300,000.00 for injuries or death arising out of any one occurrence. Property damage liability shall be furnished in an amount of at least \$50,000.00 for any one occurrence and in the unencumbered aggregate amount of at least \$100,000.00.

Subd. 7. Any license granted by the County Board under the provisions of this ordinance may be suspended at any time for noncompliance with the provisions of this ordinance or applicable state laws and regulation, or upon written notification by the Solid Waste Officer or any other person so designated to administer same or by an authorized representative of the Agency, that the continued use of the operation may endanger the health, welfare or safety of the public or may cause pollution or impairment of the environment. The notice of suspension may be served upon licensee personally or by leaving the same at the licensed premises with the person in charge thereof. A copy thereof shall be provided to the County Board. A license may be revoked only after the County Board has held a public hearing at which the licensee and other persons wishing to be heard concerning use of operation shall have the right to be heard. The date of the hearing for license revocation shall be set by the County Board and shall not be held earlier than ten calendar days after notice of said hearing was mailed to the licensee. Evidence may be adduced in a manner consistent with the rules of

evidence applied in civil cases. A transcript thereof shall be made by tape recording or other suitable technique. If, pursuant to said hearing, the County Board shall determine that the operation has been conducted in violation of this ordinance, the Board may revoke the license or continue such suspension in effect until the operator has demonstrated that full compliance with the ordinance has been attained and that such compliance will be continued in the foreseeable future.

Subd 8. Routine inspection and evaluation of any operation shall be made by the Solid Waste Officer or other person so designated to administer the same, at such frequency as to insure consistent compliance by the operation with the provisions of this ordinance. The licensee shall be provided with a written inspection report containing a precise description of any deficiencies, recommendations for their correction and the date when the corrections shall be accomplished. The licensee shall be required to allow free access to authorized representatives of the County, the County Board, the Agency, or to the authorized representatives of any other governmental agency at any time for the purpose of making such inspections as may be necessary to determine compliance with the requirements of this ordinance, or any other applicable statute, ordinance, or regulations.

Subd. 9. Where the conditions imposed by any provision of this ordinance are either more restrictive or less restrictive than comparable conditions imposed by any other provision of this ordinance, or any other applicable law, ordinance, rule or regulation, the provision which establishes the higher standards for the promotion of the public health, safety and general welfare shall prevail.

**SECTION III. SOLID WASTE OFFICER OR ANY OTHER PERSON SO DESIGNATED TO ADMINISTER THE SAME.**

The duties and responsibilities of the Solid Waste Officer or any other person so designated to administer the same, under this ordinance are hereby delegated to the County Zoning Administrator. The solid waste officer or any other person so designated to administer the same, shall have all necessary authority to implement and carry out the provisions of this ordinance, but not limited to, the following:

(a) To review and consider all license applications and supporting materials which are referred to him for

operations within the county, and after consideration, to recommend in writing with documentation to the County Board that a license be granted or denied.

- (b) To inspect operations to determine compliance with this ordinance and to investigate complaints about violations of this ordinance.
- (c) To recommend to the County Attorney that legal proceedings be initiated against a person to compel compliance with the provisions of this ordinance or to abate or control an operation not in compliance with this ordinance.
- (d) To encourage and conduct studies, investigations and research relating to aspects of solid waste management, including but not limited to, methodology, chemical and physical considerations, and engineering.
- (e) To advise, consult, and cooperate with the public and other governmental agencies in furtherance of the purpose of this ordinance.

#### **SECTION IV. SOLID WASTE STORAGE**

- Subd. 1. The owner, lessee and occupant of any premises, business establishment or industry shall be responsible for the satisfactory storage of all solid waste accumulated at that premise, business establishment or industry. No building, structure, area, or premise shall be constructed or maintained for human occupancy, use or assembly without adequate facilities for sanitary and safe storage, collection transportation, and disposal of all solid wastes.
- Subd. 2 Putrescible waste, including, but not limited to, garbage shall be stored in: (a) durable, rust-resistant, nonabsorbent, water-tight, rodent-proof, and easily cleanable containers, with close-fitting, fly-tight covers having adequate handles to facilitate handling; or (b) other types of containers acceptable to the solid collection service, complying with Agency regulations, and approved by the solid waste officer. The size and allowable weight of the containers may be determined by the solid waste collection service, as approved by the solid waste officer.
- Subd. 3 Solid waste shall be stored in durable containers or as otherwise provided in this ordinance. Where putrescible wastes are stored in combination with non-putrescible wastes, containers for the storage

- of mixture shall meet requirements for non-putrescible waste containers.
- Subd. 4 Toxic or hazardous wastes shall be stored in durable, leak-proof containers which are labeled with a description of the chemical composition or the substances stored therein. Such wastes shall be stored in a safe location and in compliance with the requirements of Agency regulations and this ordinance.
- Subd. 5. All containers for the storage of solid waste shall be maintained in such a manner as to prevent the creation of a nuisance or unsanitary condition.
- Subd. 6. Solid waste objects or materials too large or otherwise unsuitable for storage containers shall be stored in a manner which is pollution-free, nuisance-free, and satisfactory to the solid waste officer or any other person so designated to administer the same.
- Subd. 7 Solid wastes shall not be stored on public or private property for more than one (1) week without the written approval of the solid waste officer or any other person so designated to administer the same.

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**SECTION.V. COLLECTION AND TRANSPORTATION OF SOLID WASTES.**

- Subd. 1 Unless otherwise provided in these regulations, the owner, lessee and occupant of any premises, business establishment or industry and the solid waste collection service shall be responsible for the collection and transportation of all solid waste accumulated at a premise, business establishment or industry to an operation for which a permit has been issued by the Agency and the county
- Subd. 2. Vehicles or containers used for the collection and transportation of garbage and similar putrescible wastes, or solid waste containing such materials, shall be covered, leakproof, durable and of easily cleanable construction. These shall be maintained in good repair.
- Subd. 3. Vehicles or containers used for the collection and transportation of any solid waste shall be loaded and moved in such a manner that the contents will not fall, leak or spill therefrom, and shall be covered when necessary to prevent blowing of

material. Where spillage does occur, the material shall be picked up immediately by the solid waste collector or transporter and returned to the vehicle or container and the area properly cleaned.

Subd. 4. Vehicles and containers used for the collection and transportation of toxic or hazardous wastes shall be durable, enclosed and leakproof and shall be constructed, loaded, transported and unloaded in a safe, sanitary and nuisance-free manner.

Subd. 5. The County Board shall issue licenses for the hauling of solid waste for hire from the unincorporated areas of the County and any incorporated area which does not have its own licensed hauler or haulers. Such licenses shall be issued upon compliance with the following requirements:

- (a) Solid wastes must be disposed of at an operation having a permit from the Agency and a license from the County in which said solid waste disposal land-fill is located.
- (b) Filing of an application for solid waste collection and transportation license upon a form provided by the County Board.
- (c) Filing of a performance bond with sufficient sureties, in the penal sum of \$3,000.00 which bond shall be conditioned upon the applicant's full compliance with this ordinance, said bond to be subject to the approval of the County Attorney and the County Board.
- (d) Submission of specifications of all vehicles to be used for solid waste collection and transportation. Such vehicles shall have leak-proof bodies of easily cleanable construction, completely covered with metal or heavy canvas, and shall be subject to approval and periodic inspection by the solid waste officer or any other person so designated to administer same.
- (e) Submission of a description of the route to be followed by all solid waste collection and transportation vehicles between the area of collection and the solid waste operation, which route shall be subject to approval by the solid waste officer or any person so designated to administer the same.

- (f) Submission to the County Board for approval of a schedule of charges for the hauling of solid waste. It is not intended by this subdivision or any part of this ordinance to in any way restrict or forbid the licensing and setting of fees for haulers by municipalities licensing haulers from their corporate limits.
  - (g) In accordance with Minnesota Statutes 115A.93, all fees for the collection of mixed municipal solid wastes assessed by collectors operating within Nicollet County shall be based on either volume or weight based system. For volume or weight based fees, the fee shall increase with the volume or weight of the waste collected. These fees shall be implemented no later than January 1, 1993 in municipalities.
- Subd. 6. A local government unit that collects charges for solid waste collection directly from waste generators shall implement charges that increase as the volume or weight of the waste collected on-site from each generator's residence or place of business increases.
- Subd. 7. If a local government unit implements a pricing system based on volume instead of weight under subdivision 6, it shall determine a base unit size for an average small quantity household generator and establish a multiple unit pricing system that ensures that amounts of waste generated in excess of the base unit amount are priced higher than the base unit price.
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#### **SECTION VI. SOLID WASTE DISPOSAL BY SANITARY LANDFILL.**

A sanitary landfill shall comply with the following provisions:

- Subd. 1. No person shall establish, operate or maintain a sanitary landfill without first obtaining a permit from the Agency and a license from the County Board. Where the location of the proposed operation is consistent with the county solid waste management plan, the County Board shall issue a license for the operation of the construction plans and specifications describing the sanitary landfill proposed to be constructed. A minimum of three sets of said plans and specifications shall be prepared by a registered professional engineer of Minnesota and said plans shall be folded to 8 1/2 x 11 inch size. The application shall include the following information:

- (a) A current map or aerial photograph of the area showing land use and zoning within 1/4 mile of the operation. The map or aerial photograph shall be of sufficient scale to show all homes, buildings, lakes, ponds, water courses, wetlands, dry runs, rock outcroppings, road, and other applicable details and shall indicate the general topography with contours and drainage patterns. Wells shall be identified on the maps or aerial photograph, U.S.G.S. data shall be indicated, and a north arrow drawn. A location insert map shall be included.
- (b) A plot plan including legal descriptions of the site and immediate adjacent area showing dimensions, location of soil borings and present and planned pertinent features, including, but not limited to, roads, fencing, and cover stockpiles. The plan of development, including any excavation, trenching and fill areas shall be shown progressively with time. Cross sections shall be included on the plot plan or on separate sheets showing progressively with time the original and proposed elevation of excavation, trenching and fill areas. The scale of the plot plan shall not be greater than 300 feet per inch.
- (c) An ultimate land use plan, including intermediate stages, describing all proposed future uses of the land upon which the operation is located. The scale of the ultimate land use plan shall not be greater than 200 feet per inch.
- (d) A report indicating:
1. Population and areas expected to be served by the proposed operation.
  2. Anticipated type, quantity and source of material to be disposed of at the operation.
  3. Geological formations and ground water elevations to a depth of at least ten (10) feet below proposed excavation and lowest elevation of the operation, including the high water table. Such data shall be obtained by soil borings or other means approved by the solid waste officer or any other person so designated to administer the same.
  4. Source and characteristics of cover material and method of protecting cover material for winter operation.

- 5 The type and amount of equipment to be provided at the operation for excavating, earth moving, spreading, compaction and other needs.
6. Area of operation in acres.
7. Owner of operation.
- 8 Persons responsible for actual operation and maintenance of the operation and intended operating procedures.
9. Provision for training and periodic re-training of operation and maintenance personnel.
10. Information relating to items in Section 1, 2, and 4 of Agency Regulation SW 6.
11. Provision for Termination of operation.

(e) Evidence that disposal of toxic and hazardous wastes will be conducted in a manner which will prevent the creation of land or water pollution and will safeguard the public health, including complete construction plans and specifications, design data and proposed operating procedures for the area in which disposal of the toxic and hazardous wastes shall take place.

(f) Written proof that the applicable local government has been given at least thirty (30) days written notification of the pendency of the application for a license.

(g) A certificate from the County Zoning Administrator that the use proposed is in accordance with the established County Zoning Ordinance.

Subd. 2 The fill and trench areas of sanitary landfill operations are prohibited within the following areas:

(a) Within 1,000 feet, at the time of commencement of the operation, of the nearest edge of the right-of-way of any state, federal or interstate highway or the boundary of a public park or of an occupied dwelling. Notwithstanding said distance requirement, an operation shall be considered to comply with this provision if it is screened by natural objects, plantings, fences or other appropriate means so that it is not readily visible

from such a highway or park.

- (b) Within "Shoreland."
- (c) Within one mile of a municipal well or one mile of a municipal water intake.

Subd. 3. A sanitary landfill operation shall be constructed, operated, and maintained in accordance with the following requirements:

- (a) Sanitary facilities adequate for employees shall be available at the site.
- (b) Shelter facilities adequate for employees and maintenance and storage for equipment shall be available at the site.
- (c) Litter control devices shall be provided at the site.
- (d) Electrical service adequate for operations and repairs shall be provided at the site.
- (e) Firefighting facilities adequate to insure the safety of employees and adjacent property owners shall be provided.
- (f) Emergency first aid equipment adequate to provide treatment for persons injured in accidents while at the site shall be provided at the site.
- (g) A potable water supply adequate for employees shall be provided at the site.
- (h) Communication facilities adequate for emergency purposes shall be provided at the site.
- (i) The operation shall be fenced and a gate shall be provided at its entrance which is kept locked when an attendant is not on duty.
- (j) An all weather haul road to the unloading area shall be provided at the site.
- (k) Equipment sufficient for spreading, compacting and covering operations, including sufficient reserve equipment or arrangements to immediately provide cover during periods of breakdown, shall be provided at the site.
- (l) A sign shall be provided at each entrance of the operation, stating the name of the licensee, the

schedule of days and hours upon which the operation is open to the public, the procedures for use of the operation, the Agency permit number, and the penalty for violation of this ordinance.

- (m) A ground water and surface water monitoring system acceptable to the solid waste officer or any other person so designated to administer the same and the Agency shall be provided at the expense of the licensee and a report submitted to the solid waste officer or any other person so designated the same, and the Agency on a form prescribed by the Agency on a quarterly basis or such more frequent basis as the Agency may prescribe.
- (n) Visual screening of the sanitary landfill operation, as approved by the solid waste officer or any other person so designated to administer same, shall be provided by use of natural objects, trees, plants, seeded soil berms, fences, or other suitable means.
- (o) A suitable disposal area shall be provided for individuals who wish to transport and dispose of their own solid waste.
- (p) No person shall cause, suffer, allow or permit the open burning of solid waste.
- (q) Solid waste shall be deposited in such a manner as to prevent the pollution of ground or surface water.
- (r) Dumpings of solid waste shall be confined to as small an area as practicable and surrounded with appropriate facilities to confine possible wind-blown material resulting from the operation shall be collected and returned to the area by the owner or operator.
- (s) Solid waste shall be compacted as densely as practicable and covered after each day of operation, or as specified by the Agency, with a compacted layer of at least six inches of suitable cover.
- (t) Surface water drainage shall be diverted around the landfill operating area.
- (u) The disposal operation and the adjacent property line shall be separated by a distance of at least 20 feet.

- (v) Flies, rodents, and other insects or vermin shall be effectively controlled.
- (w) Salvaging is prohibited on the operating area of a sanitary landfill site. Where salvaging is conducted on a sanitary landfill site, it shall be conducted in a manner acceptable to the solid waste officer or any other person so designated to administer the same.
- (x) An attendant shall be on duty at all times while the sanitary landfill is open for public use.
- (y) Within one month after final termination of a sanitary landfill operation, or a major part thereof, the area upon which disposal was so terminated shall be covered with at least two feet of compacted earth material and adequately graded to allow surface runoff.
- (z) The finished surface of the filled area shall be covered with adequate top soil and seeded with native grasses or other suitable vegetation immediately upon completion, or immediately in the spring on areas terminated during winter conditions. If necessary, seeded slopes shall be covered with straw or similar material to prevent erosion.
- (aa) Prior to completion of a sanitary landfill operation, the Agency and the solid waste officer or any other person so designated to administer same, shall be notified in order that an investigation of the operation may be conducted by each before earth moving equipment removed from the property.
- (bb) Toxic and hazardous wastes shall be disposed of in a sanitary landfill site in accordance with the following procedures or as otherwise designated by the Agency:
  - (1) A separate area shall be designated for the disposal of these materials. A permanent sign shall be posted in the area, indicating its designated use and precautions which shall be taken during disposal.
  - (2) Disposal shall take place at least ten feet above the groundwater level and at least ten feet above bedrock formations. The toxic and hazardous waste disposal areas to be used shall be sealed in a manner acceptable to the

solid waste officer or any other person so designated to administer the same, prior to disposal.

- (3) No toxic and hazardous waste materials shall be accepted for disposal or disposed of in a sanitary landfill having a license under this ordinance unless the material is identified to the satisfaction of the solid waste officer.
- (4) Where considered possible by the solid waste officer or any other person so designated to administer the same, toxic and hazardous waste material shall be neutralized or otherwise made harmless prior to disposal.
- (5) Upon disposal of toxic and hazardous wastes, containers and any materials washed from the vehicles transporting the material shall be immediately covered with at least 18 inches of earth.
- (6) Where necessary to prevent land pollution, water pollution, a public nuisance or threat to public health, welfare or safety, the solid waste officer or any other person so designated to administer same, may impose conditions for the disposal of toxic and hazardous wastes within a disposal facility in addition to those specifically established in this ordinance.

Subd. 4. Non-putrescible materials such as brick, stone, sand and similar materials may be disposed of as a base in surface waters at sanitary landfill sites if such disposition can be accomplished without creating a potential for water pollution or land pollution or a threat to the public health, welfare or safety. Any such proposed disposition must be detailed in the permit application and approved by the solid waste officer or any other person so designated to administer the same and the Agency.

Subd. 5. Reports describing the types and quantities of waste, including, but not limited to toxic or hazardous wastes, which are disposed of at this site shall be submitted to the Agency and to the solid waste officer or any other person so designated to administer the same, each month, together with other information on the operation of the sanitary landfill.

Subd. 6. A sanitary landfill shall be terminated so as to prevent the creation of air, water or land pollution, a public nuisance, or a threat to the public health, welfare or safety. A sanitary landfill shall not be construed to be adequately terminated until a description of the general type and specific location of solid waste materials disposed of on the site, the number, type and depth of lifts, the original and final surface elevation profiles and other pertinent information have been approved by the solid waste officer and registered with the County Register of Deeds, and until the manner of termination of the site has been approved by the solid waste officer. The notice so filed shall also include a description of the type and location of toxic and hazardous waste materials disposed of on the site, the number of gallons of each kind of such material so disposed, original and final surface elevation and profiles, construction details concerning the storage pit, pit lining and pit walls, and other pertinent information, as approved by the solid waste officer.

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#### **SECTION VII. INCINERATION.**

All new and existing incinerators having a capacity greater than 6,000 pounds per hour and all incinerators used for the incineration of toxic and hazardous wastes shall be designed, operated, and maintained in accordance with this ordinance and Agency regulations.

Subd. 1. It is unlawful for any person to construct, establish, maintain, or operate an incinerator without first obtaining a license from the County Board for each incinerator so constructed, maintained or operated. The following information shall be submitted as a part of the application.

(a) A minimum of three (3) sets of construction plans and specifications, folded to 8 1/2 x 11 inch size, prepared by a registered engineer of Minnesota to serve as the basis for construction of facilities adequate to comply with this ordinance and Agency regulations. The construction plans and specifications shall include a plot plan showing land use, zoning, and the location, type and height of all buildings within 500 feet of the proposed installation.

(b) An engineering report including furnace design criteria and expected performance data, the

present and future population and area to be served by the incinerator, and the characteristics, quantities and sources of solid waste to be incinerated.

- (c) Plans for the disposal of incinerator residue, and emergency disposal of solid waste in the event of major incinerator plant breakdown.
- (d) Owner of the incinerator.
- (e) Persons responsible for actual operation and maintenance of the plant, intended operating procedures, and provision proposed to be made for periodic training and re-training of operating and maintenance personnel.
- (f) Such additional information as may be requested by the solid waste officer or any other person so designated to administer same.
- (g) Written proof that the applicable local government has been given at least thirty (30) days notification of the pendency of the application for a license.

Subd. 2. Incinerators shall be constructed, operated and maintained in accordance with recognized engineering principles and the following requirements:

- (a) The incinerator plant shall be so situated, equipped, operated and maintained as to minimize interference with other activities in the area. All incoming and outgoing traffic shall be controlled by the licensee in such a manner as to provide orderly and safe ingress and egress.
- (b) Shelter and sanitary facilities adequate for plant personnel shall be provided at the site.
- (c) A permanent sign shall be posted at the entrance to the operation identifying the operation, and showing its Agency permit number, and indicating the hours and days when the operation is open for public use. Public access to the operation shall be limited to those times when authorized personnel are on duty.
- (d) All incoming solid waste to be incinerated at the operation shall be confined to the

unloading area. Adequate holding bin capacity shall be provided to accommodate all incoming solid waste.

- (e) Facilities shall be designed to provide for dust control in the unloading and charging areas, and dust control measures shall be employed throughout the operation to prevent avoidable amounts of particulate from becoming airborne.
- (f) The incinerator operation shall have weighing facilities available. Permanent records shall be maintained indicating the total weight of material incinerated, the total hours of incinerator operation, and the means employed for disposal of residue. These records shall be submitted monthly to the solid waste officer or any other person so designated to administer the same, and the Agency in a form prescribed by the Agency.
- (g) Fire-fighting equipment, meeting the standards of Underwriters Laboratory, Inc., or such other nationally recognized safety standards as the solid waste officer or any other person so designated to do the same shall approve, shall be available in the storage and charging area and elsewhere as needed.
- (h) Arrangements shall be made with the local fire protection agency to provide fire-fighting forces in an emergency.
- (i) Communication facilities adequate for emergency purposes shall be provided.
- (j) Equipment shall be provided in the storage and charging areas and elsewhere as necessary to allow cleaning after each day of operation and to maintain the operation in a sanitary condition.
- (k) All equipment throughout the operation, including, but not limited to, charging openings shall be provided with safety equipment.
- (l) A continuously recording pyrometer shall be provided in order to maintain continuous records of temperature in the combustion chambers. Such records shall be submitted to the solid waste officer on a monthly basis in

a form prescribed by the Agency.

- (m) All residue removed from the incinerator operation shall be promptly disposed of in a sanitary landfill. Residue containing toxic or hazardous wastes shall be analyzed to determine its chemical composition, identified to the satisfaction of the solid waste officer and disposed of in a toxic pit within the sanitary landfill or as otherwise designated by the Agency.
- (n) Performance tests of the plant may be required by the solid waste officer or any other person designated to administer the same. A report covering the results of these performance tests shall be prepared by the design engineer of the project and submitted to the solid waste officer or any other person so designated to administer the same, with a copy of all supporting data. Upon completion of the plant and prior to initial operation, the solid waste officer or any other person so designated to administer the same, and the Agency shall be notified to allow their personnel to inspect the plant
- (o)

both prior to and during the performance tests.

#### SECTION VIII. OPEN BURNING RESTRICTIONS.

- Subd. 1. General. No person shall dispose of refuse by open burning, or cause, suffer, allow or permit open burning of refuse; except that in an unincorporated area not regularly served by a licensed hauler, refuse originating from dwelling units, including household rubbish, leaves and other natural matter, not including garbage and other putrescible wastes, may be disposed of by open burning if confined to a suitable container and when done in a nuisance-free and aesthetic manner.
- Subd. 2. Exceptions. Exceptions herefrom may be allowed upon application and approval by the Director or his delegate provided that the burning is not prohibited by or is conducted in compliance with other applicable laws, ordinances, and regulations. Exemption to conduct open burning under the provision of this regulation does not excuse a person from the consequences, damages, or injuries which may result therefrom. The following are exceptions for which application may be made:

- (1) Fires purposely set for the instruction and training of public and industrial fire-fighting personnel.
  - (2) Fires purposely set for the elimination of a fire hazard which cannot be abated by any other practicable means.
  - (3) The burning of trees, brush, grass and other vegetable matter in the clearing of land, right-of-way maintenance operations, and agricultural crop burning is permitted under the following conditions:
    - (a) The prevailing winds at the time of burning must be away from any city or town.
    - (b) The location of burning must not be within 1,000 feet of an occupied residence other than those located on the property on which the burning is conducted.
    - (c) Oils, rubber or other similar materials which produce unreasonable amounts of air contaminants may not be burned.
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#### **SECTION IX. LICENSE FEES**

Approval of an application to the County Board for a license for a solid waste management facility shall be contingent upon the payment to the county of a license fee in the amount specified below. Such license fees are hereby found to be equal to the cost to the county of processing the license application, administering and enforcing this ordinance with respect to said licenses. The fees prescribed shall be paid by a license applicant with respect to each facility maintained by him. Solid waste collectors' fees shall be paid annually as a condition for license renewal. Nonpayment of the annual solid waste collector's fee shall be grounds for denial of license renewal. Fees shall be paid to the county treasurer prior to issuance of licenses. The schedule of license fees shall be set by the County Board.

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#### **SECTION X. RATES AND CHARGES FOR SOLID WASTE MANAGEMENT.**

- Subd. 1 Owners, lessees and occupants of property. Owners, lessees, and occupants of property situated within the county shall pay for solid waste management services to their properties provided by the county or through its contractor, according to the schedule established or approved by the County Board.

- Subd. 2. Users of facilities. Users of solid waste management facilities designated or provided by the county, by and through its contractor, who are not owners, lessees, or occupants of property situated within the county shall pay charges for the use of said facilities according to the schedule established or approved by the County Board.
- Subd. 3. Sanitary Landfill Operators. All sanitary landfill operators provided by the County or designated by the County as a landfill site for residents of the County, may charge a user or a disposal fee based on rates set by order of the Board of County Commissioners as determined by them to be reasonable to the operator and reasonable to the user of the facilities.
- Subd. 4. Solid Waste Management Fund. A special account on the official books of the county is hereby created which shall be known as the Solid Waste Management Fund. All receipts from the rates and charges collected pursuant to this ordinance and all receipts from the sale of real or personal property pertaining to the solid waste management system and the proceeds of all gifts, loans, and issuance of bonds for the purpose of the system shall be credited to the solid waste management fund. All costs of acquisition, construction, enlargement, improvement, repair, supervision, control, maintenance, and operation of the solid waste management system and facilities which are owned and operated by the county, but not those owned and operated by its contractor, shall be charged to the solid waste management fund.

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#### **SECTION XI VARIANCES.**

Upon written application by the applicant or operator, the County Board may grant variances from the provisions of this ordinance in order to promote the effective and reasonable application and enforcement of the provisions of this ordinance.

A variance may be granted by the Board after a public hearing where the Board determines that enforcement of this ordinance would cause the applicant undue hardship, or that the ordinance cannot be complied with due to technological impossibility or economic unreasonableness. Such a variance shall not be granted for a period in excess of two years, but may be renewed upon application of the applicant and after public hearing. A variance may be revoked by the Board at the public hearing prior to expiration of the variance. An application for a variance shall be accompanied by a plan and time schedule for achieving compliance with the ordinance. Prior to any public hearing held by the Board under

this provision, persons who may be adversely affected by the granting of the proposed variance shall be given at least thirty (30) days' notice of said public hearing.

**SECTION XII NONCONFORMING SITES AND FACILITIES.**

Solid waste management facilities in existence on the effective date of this ordinance and operation of such facilities shall conform to the provision of this ordinance no later than 60 days after the adoption of the ordinance, or terminate operations no later than that date unless granted a variance.

**SECTION XIII ADDITIONAL REQUIREMENTS.**

For the purpose of protecting the public health, safety and welfare, the County Board may impose additional requirements consistent with the intent of this ordinance for the operation of solid waste disposal sites or facilities.

**SECTION XIV SEVERABILITY.**

It is hereby declared to be the intention of the County Board that the several provisions of this ordinance be severable in accordance with the following:

Subd. 1 If any Court of competent jurisdiction shall adjudge any provision of this ordinance to be invalid, such judgment shall not affect any other provisions of this ordinance not specifically included in said judgment.

Subd. 2 If any court of competent jurisdiction shall adjudge invalid the application of any provision of this ordinance to a particular structure site, facility or operation, such judgment shall not affect the application of said provision to any other structure, site, facility or operation not specifically included in said judgment.

**SECTION XV. PROVISIONS ARE ACCUMULATIVE.**

The provisions in this ordinance are accumulative and additional limitations upon all other laws and ordinances heretofore passed or which may be passed hereafter, covering any subject matter in this ordinance.

**SECTION XVI. NO CONSENT.**

Nothing contained in this ordinance shall be deemed to be a consent, license, or permit to locate, construct, operate or maintain any site, facility or operation, or to carry on any activity.

**SECTION XX. EFFECTIVE DATE.**

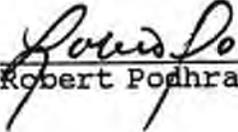
This ordinance shall be in full force and effect from and after its passage and publication according to law.

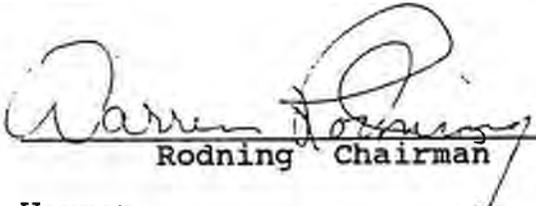
After due publication, the above amended Nicollet County Solid Waste Management Ordinance was adopted by the Nicollet County Board of Commissioners at a Public hearing held at 11:00 a.m. on the 15th day of December, 1992, at St. Peter, Minnesota.

Dated this 15th day of December, 1992, at St. Peter, Minnesota.

A copy of this ordinance has been filed for use and examination by the public in the Office of the County Auditor of Nicollet County, Minnesota.

ATTEST:

  
\_\_\_\_\_  
Robert Podhradsky Clerk to the Board

  
\_\_\_\_\_  
Rodning Chairman

Warren  
Nicollet County Board of Commissioners



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**SECTION XVII. VIOLATIONS.**

Subd. 1. Any person who shall violate or fails, neglects or refuses to comply with the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction thereof shall be punished therefor as provided by Minnesota law. A separate offense shall be deemed committed upon each separate day during or on which a violation occurs or continues. The County is responsible for the enforcement of this ordinance.

Subd. 2. This ordinance, in addition to other remedies, may be enforced by injunction, action to compel performance or other appropriate action in District Court to prevent, restrain, correct or abate violations.

**SECTION XVIII. OTHER ORDINANCES AND REGULATIONS.**

Nothing in this ordinance shall preclude any local unit of government from adopting stricter regulations than this ordinance.

**SECTION XIX. DESIGNATION OF SANITARY LANDFILL SITES.**

The Board of County Commissioners shall, from time to time, by resolution, designate such Sanitary Landfills as it deems necessary and appropriate for use by the citizens of the County and licensed haulers; provided such Sanitary Landfills comply with all the terms of this Ordinance and are fully licensed by the Agency and the County wherein they are situated.

C. SIBLEY COUNTY ORDINANCE

RESOLUTION TO AMEND  
THE SIBLEY COUNTY  
SOLID WASTE ORDINANCE

WHEREAS, the Sibley County Solid Waste Ordinance was established in 1983; and

WHEREAS, the Waste Management Act and Related Acts and Laws as amended through the 1992 Legislative Session make requirements pertaining to volume or weight based pricing; and

WHEREAS, these provisions are not included in the existing Sibley County Solid Waste Ordinance; and

NOW THEREFORE BE IT RESOLVED that the Sibley County Board of Commissioners adopt the amendments to become a part of the Sibley County Solid Waste Ordinance.

Dated this 22nd day of December, 1992.

SIBLEY COUNTY BOARD OF COMMISSIONERS

By Don Schwecks  
Chairman of the Board

ATTEST:

Gene O. Johnson  
Auditor

SOLID WASTE ORDINANCE

An ordinance authorizing and providing for County Solid Waste Management, establishing powers and duties in connection therewith, establishing standards and requirements for solid waste management operations within the County of SIBLEY, requiring a license for the establishment and use of a solid waste management operation; embodying minimum standards and requirements established by rules of the Minnesota Pollution Control Agency; providing for enforcement of said requirements; requiring a performance bond and insurance; and imposing penalties for failure to comply with these provisions; in purpose and object to promote health, welfare and safety of the public and protect resources of water, air and land pursuant to Minnesota Statutes, Chapters 115, 115A, 116, and 400.

The County Board of Commissioners of the County of SIBLEY, hereinafter referred to as the County Board, does ordain:

SECTION I. DEFINITIONS. Unless specifically altered, terms and abbreviations used in this ordinance shall be interpreted in a manner consistent with Minnesota Statutes, Chapters 115, 115A, 116 and 400 and rules of the Agency, which have been or hereafter may be adopted under those provisions. Terms and abbreviations used herein which are not specifically defined by law shall be construed in accordance with the context and professional usage.

Subd. 1. "Agency" means the Minnesota Pollution Control Agency.

Subd. 2. "Air Contaminant" means the presence in the outdoor atmosphere of any dust, fume, mist, smoke, vapor, gas or other gaseous fluid, or particulate substance differing in composition from or exceeding in concentration the natural components of the atmosphere.

Subd. 3. "Air Pollution" means the presence in the outdoor atmosphere of any air contaminant or combination thereof in such quantity, of such nature and duration, and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property.

Subd. 4. "Canister System" means one or more commercial solid waste storage containers (such as "green boxes" and "dumpsters") located to function as intermediate disposal facilities, and which are serviced on a regular basis by a public or private solid waste hauler.

Subd. 5. "Commercial Hauler" means any person, as defined in Section I, who owns, operates, or leases vehicles for hire for the purpose of collection and/or transportation of any type of solid waste.

Subd. 6. "County" means any department or representative of the county who is authorized by this ordinance or otherwise by the County Board to represent the County of Sibley in the enforcement or administration of this ordinance.

Subd. 7. "Composting" means the controlled biological decomposition of selected solid waste in a manner resulting in an innocuous final product.

Subd. 8. "Cover Material" is material that is used to cover compacted solid waste in a land disposal site. Important general characteristics of good cover material are low permeability, uniform texture, cohesiveness and compactibility. Suitable cover materials include, but are not limited to, sandy loam, loam, silt loam, sandy clay loam, silty clay loam, clay loam, sand clay, and loamy sand.

Subd. 9. "Garbage" means discarded material resulting from the handling, processing, storage, preparation, serving and consumption of food.

Subd. 10. "Hazardous Waste" means any refuse or discarded material or combinations of refuse or discarded materials in solid, semi-solid, liquid, or gaseous form which cannot be handled by routine waste management techniques because they pose a substantial present or potential hazard to human health or other living organisms because of their chemical, biological, or physical properties. Categories of hazardous waste materials include, but are not limited to, explosives, flammables, oxidizers, poisons, irritants, and corrosives. Hazardous waste does not include sewage sludge and source material, special nuclear material or by-product material as defined by the Atomic Energy Act of 1954, as amended.

Subd. 11. "Incineration" means the process by which solid wastes are burned for the purpose of volume or weight reduction or energy recovery in facilities designed for such use.

Subd. 12. "Intermediate Waste Disposal Facility" is a facility for the preliminary or incomplete disposal of solid waste including, but not limited to, transfer station, canister site or system, open burning site, incineration, composting, recovery of recyclable materials, reduction, shredding, and compression.

Subd. 13. "Land Pollution" means the presence in or on the land of any waste in such quantity, of such nature and duration, and under such condition as would affect injuriously any waters of the state, create air contaminants or cause air pollution.

Subd. 14. "Licensee" means a person who has been issued a license by the Board for solid waste management purposes pursuant to this ordinance.

Subd. 15. "Operation" means any site, facility, or activity relating to solid waste management.

Subd. 16. "Person" means any human being, any municipality or other governmental or political subdivision or other public agency, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, or any other legal entity.

Subd. 17. "Putrescible Material" means solid waste which is capable of being rotten, or which may reach a foul state of decay or decomposition.

Subd. 18. "Refuse" means putrescible and nonputrescible solid wastes, including garbage, rubbish, ashes, incinerator ash, incinerator residue, street cleanings, market and industrial solid wastes, and municipal treatment wastes which do not contain free moisture.

Subd. 19. "Rubbish" means nonputrescible solid wastes, including, but not limited to, ashes, consisting of both combustible and noncombustible wastes, such as paper, cardboard, tin cans, yard clippings, wood, glass, bedding, crockery, or litter of any kind.

Subd. 20. "Sanitary Landfill" means a land disposal site employing an engineered method of disposing of solid waste on land in a manner that minimizes environmental hazards by spreading the solid waste in thin layers, compacting the solid waste to the smallest practical volume, and applying cover material at the end of each operating day, or at intervals as may be required by the Agency.

Subd. 21. "Shoreland" means land located within the following distances from public water: a) 1,000 feet from the ordinary high water mark of a lake, pond, or flowage; and b) 300 feet from a river or stream, or the landward extent of a flood plain designated by ordinance on such a river or stream, whichever is greater.

Subd. 22. "Solid Waste" means garbage, refuse, sludge from a water supply treatment plant or air contaminant treatment facility, or other discarded waste materials and sludges, in solid, semi-solid, liquid or contained gaseous form, resulting from industrial, commercial, mining, or agricultural operations, or from community activities, but does not include hazardous waste; animal waste used as fertilizer; earthen fill, boulders, rock; sewage sludge, solid or dissolved material in domestic sewage or other common pollutants in water resources, such as silt, dissolved or suspended solids in

industrial waste water effluents or discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended; dissolved materials in irrigation return flows; or source material, special nuclear material, or by-product material as defined by the Atomic Energy Act of 1954, as amended.

Subd. 23. "Solid Waste Management Facility" means a sanitary landfill, or an intermediate disposal facility.

Subd. 24. "Solid Waste Management" means the storage, collection, or removal of solid waste from or on public or private property, its transportation to intermediate or final disposal facilities or its final disposal by methods approved by the Agency.

Subd. 25. "Transfer Station" means an intermediate solid waste disposal facility in which solid waste collected from any source is temporarily deposited to await transportation to another solid waste management facility.

Subd. 26. "Water Pollution" means a) the discharge of any pollutant into any waters of the state or the contamination of any waters of the state so as to create a nuisance or render such waters unclean, or noxious, or impure so as to be actually or potentially harmful or detrimental or injurious to public health, safety or welfare, to domestic, agricultural, commercial, industrial, recreational or other legitimate uses, or to livestock, animals, birds, fish or other aquatic life; or b) the man-made or man-induced alteration of the chemical, physical, biological, or radiological integrity of waters of the state.

Subd. 27. "Waters of the State" means any waters, surface or underground, except those surface waters which are not confined but are spread and diffused over the land. "Waters of the state" includes all boundary and inland waters.

## SECTION II. GENERAL PROVISION.

Subd. 1. No person shall cause, permit, or allow land or property under his control to be used for solid waste management purposes, except at an operation for which a license has been granted by the County Board, unless otherwise provided by this ordinance. A license shall not be required under this ordinance for any site used for the disposal of solid waste from only a single family household, a member of which is the owner, occupant or leasee of the property, but such site shall be operated and maintained in a nuisance-free and aesthetic manner consistent with this ordinance.

Subd. 2. Any operation to be used for any method of solid waste management not otherwise provided for in this ordinance must be licensed by the County Board before operation may commence. The license application shall include three sets of complete plans, specifications, design data and ultimate land use plans. Proposed operating procedures for a solid waste disposal facility must be prepared by a professional engineer registered in Minnesota. The applicant shall procure a proper zoning permit to accompany the application if required by the County Zoning Ordinance. No license shall be issued for a solid waste facility unless the applicant has demonstrated to the satisfaction of the County Board the availability of revenues necessary to operate the facility in accordance with applicable state and local laws, ordinances and rules.

Subd. 3. After receiving an application for an operation, the County Board shall refer such applications to the County Solid Waste Officer who shall give his recommendation to the County Board concerning whether it should issue or deny the license. If an applicant is denied a license, such applicant shall be notified in writing of the reasons therefor by the County Board. A denial shall be without prejudice to the applicant's right to an appearance before the County Board or to the applicant's right to file a further application after revisions are made to satisfy objections specified as reasons for the denial.

Subd. 4. The County Board shall refuse to issue a license for any operation which does not comply with this ordinance, Agency rules and the County's solid waste management plan.

Subd. 5. Issuance of any license pursuant to the provisions of this ordinance shall be contingent upon the applicant furnishing to the County a bond in an amount to be set by the County Board. This bond shall name the County as obligee with sufficient sureties duly licensed and authorized to transact business in the State of Minnesota as sureties. The condition of such bond shall be that if the licensee fails to comply with any of the requirements or fails to perform any of the acts required of an operation or ceases to operate any monies or expend any labor or material to restore the operation to a condition in compliance with this ordinance, the bond holder and the sureties on its bond shall reimburse the County for any and all the expenses incurred by the County to remedy failure of the licensee to comply with the terms of this ordinance, and the bond holder and its sureties shall indemnify and save the County harmless from all losses, costs, and charges that may occur to the bond holder or its sureties because of any default of the licensee under the terms of his license to operate in compliance with the terms of the ordinances of the County.

Subd. 6. In addition to the bond referred to in subd. 5, issuance of any license pursuant to the provisions of this ordinance shall be contingent upon the applicant securing, and furnishing to the County a copy of a certificate therefor, the following types of insurance issued to the licensee by insurers duly licensed within the State of Minnesota and in amounts to be set by the County Board; general liability including, but not limited to, bodily injury, property damage, motor vehicle, loading and unloading and gradual pollution insurance.

Subd. 7. Any license granted by the County Board under the provisions of this ordinance may be suspended by the County Board at any time for noncompliance with the provisions of the license, this ordinance or applicable state laws or rules, or upon written notification to the licensee and the County Board by the Solid Waste Officer or by an authorized representative of the Agency that the continued use of the operation may endanger the health, welfare or safety of the public or that the continued use may cause pollution or impairment of the environment.

The notice of suspension shall be deemed adequately served whenever it is served upon the licensee personally or by leaving the same at the licensed premises with the person in charge thereof. A copy of the notice of suspension shall be provided to the County Board. The County Board shall remove the license suspension only upon presentation of evidence acceptable to the County Board that the conditions which were cited as cause for suspension have been fully corrected. A license may be revoked only after the County Board has held a public hearing at which the licensee and other persons wishing to be heard concerning the operation shall have the right to be heard. The date of the hearing for license revocation shall be set by the County Board and shall not be held earlier than ten calendar days after notice of said hearing was mailed to the licensee. Evidence may be adduced in a manner consistent with the rules of evidence applied in civil cases. A transcript thereof shall be made by tape recording or other suitable technique. If, pursuant to said hearing, the County Board shall determine that the operation has been conducted in violation of the provisions of the license, this ordinance, State laws or State rules, the County Board may revoke the license or continue such suspension in effect until the operation has demonstrated that full compliance with the provisions of the license, this ordinance, State laws and State rules has been attained and that such compliance will be continued in the foreseeable future.

Subd. 8. Routine inspection and evaluation of an operation shall be made by the Solid Waste Officer at such frequency as to ensure consistent compliance by the operation with the provisions of this ordinance. The licensee shall be provided with a written

inspection report containing a precise description of any deficiencies, recommendations for the correction thereof and the date when the corrections shall be accomplished. Copies of said report(s) shall be furnished to the Agency. The licensee shall allow to authorized representatives of the County or the Agency access to the facility at any time for the purpose of making such inspections as may be necessary to determine compliance with the requirements of this ordinance, and any other applicable statute, ordinance, or rule.

Subd. 9. Where the conditions imposed by any provision of this ordinance are either more restrictive or less restrictive than comparable conditions imposed by any other provision of this ordinance, or any other applicable law, ordinance or rule the provision which establishes the higher standards for the promotion of the public health, safety, and general welfare shall prevail.

Subd. 10. Every license issued for a solid waste operation shall be registered with the office of the County Auditor.

### SECTION III. SOLID WASTE OFFICER.

Subd. 1. The Solid Waste Officer shall have all necessary authority to implement and carry out the provisions of this ordinance including, but not limited to, the following:

(a) To review and consider all license applications and supporting materials which are referred to the Solid Waste Officer for operations within the County, and after such review and consideration, to recommend in writing with documentation to the County Board whether a license should be granted or denied.

(b) To inspect operations to determine compliance and to investigate complaints about violations of this ordinance.

(c) To recommend to the County Attorney that legal proceedings be initiated against a person or group of persons to compel compliance with the provisions of this ordinance or to terminate or control an operation not in compliance with this ordinance.

(d) To encourage and conduct studies, investigations and research relating to aspects of solid waste management, including, but not limited to, methodology, chemical and physical considerations, and engineering.

(e) To advise, consult, and cooperate with the public and other governmental agencies in furtherance of the purpose of this ordinance.

### SECTION IV. SOLID WASTE STORAGE.

Subd. 1. Solid wastes shall be stored in a manner which complies with state rules administered by the Agency.

Subd. 2. Toxic or hazardous wastes shall be stored in accordance with State rules administered by the Agency.

Subd. 3. Transfer stations and canister sites may be established and shall be licensed annually according to Section VIII and shall meet all requirements listed in Section IV as well as any additional requirements imposed by the County Board.

Subd. 4. Solid wastes shall not be stored on public or private property for more than two (2) weeks without the written approval of the Solid Waste Officer. Nonputrescible wastes suitable for recycling shall not be stored on public or private property in a manner which creates a nuisance, blight, or health hazard.

SECTION V. COLLECTION AND TRANSPORTATION OF SOLID WASTE.

Subd. 1. The collection and transportation of solid waste shall be performed in accordance with State rules administered by the Agency.

Subd. 2. Toxic or hazardous wastes shall be transported in a manner consistent with State rules administered by the Agency.

Subd. 3. No person may collect or transport solid waste for hire without first obtaining a license from the County Board. The County Board shall not issue a license until the applicant complies with all of the following requirements:

(a) The applicant shall submit a completed application form provided by the County for a solid waste collection and transportation license.

(b) The applicant shall submit to the County specifications of all vehicles to be used for solid waste collection and transportation. Such vehicles shall have leak-proof bodies of easily cleanable construction, completely covered with metal, heavy canvas or other suitable covering, and shall be subject to approval and periodic inspection by the Solid Waste Officer.

(c) The applicant shall submit a description of the route(s) to be followed by all solid waste collection and transportation vehicles between the area of collection and the solid waste disposal operation.

(d) The applicant shall meet all of the applicable requirements for obtaining a license which are specified in Section II of this ordinance.

(e) The applicant shall be financially and operationally capable, as determined by the County Board, to properly collect, transport and dispose of all solid waste.

(f) In accordance with Minnesota Statutes 115A.93, all fees for the collection of mixed municipal solid waste assessed by collectors operating within Sibley County shall be based on either a volume or weight based system. For volume or weight based fees, the fee shall increase with the volume or weight of the waste collected. These fees shall be implemented no later than January 1, 1993 in municipalities.

Subd. 4. A local government unit that collects charges for solid waste collection directly from waste generators shall implement charges that increase as the volume or weight of the waste collected on-site from each generator's residence or place of business increases.

Subd. 5. If a local government unit implements a pricing system based on volume instead of weight under subdivision 4, it shall determine a base unit size for an average small quantity household generator and establish a multiple unit pricing system that ensures that amounts of waste generated in excess of the base unit amount are priced higher than the base unit price.

SECTION VI. SOLID WASTE LAND DISPOSAL FACILITIES.

Subd. 1. Land disposal facilities, including, but not limited to, sanitary landfills, modified landfills and demolition landfills, shall meet all the requirements of State rules administered by the Agency which govern these facilities.

Additionally, no person shall establish, operate or maintain a land disposal facility without first obtaining a license from the County Board in accordance with Section II.

Subd. 2. An application for a county license shall include, but not be limited to, the following:

(a) An operating schedule and a schedule of fees to be levied at the land disposal facility.

(b) A notarized affidavit stating that the applicable local governments have been given at least thirty (30) days notification of the pending application for a license.

(c) A certificate from the County Zoning Administrator that the use proposed is in accordance with the established County Zoning Ordinance.

(d) Sufficient documentation to enable the County Board to determine whether the applicant is financially and operationally capable to properly dispose of all solid waste.

SECTION VII. INCINERATION AND ENERGY RECOVERY.

All incinerators having a capacity greater than 6,000 pounds per hour shall meet the requirements of State rules administered by the Agency. Additionally, the following requirements shall apply to all incinerators of any size which process solid waste from more than a single household.

Subd. 1. No person shall install or operate an incinerator without first obtaining a license from the County Board.

Subd. 2. The applicant shall meet all requirements for obtaining a license as specified in Section II of this ordinance. Furthermore, the County Board shall not issue a license until the applicant and facility comply with the following requirements:

(a) All of the same criteria for incinerator construction, operation and maintenance contained in State rules administered by the Agency which presently apply only to incinerators with capacities greater than 6,000 pounds per hour.

(b) Upon completion of the facility and prior to initial operation, the County Solid Waste Officer shall be notified to allow personnel of the County to inspect the facility both prior to and during the performance tests.

Subd. 3. The application for a county license shall include, but not be limited to, the following:

(a) An operating schedule and a schedule of fees to be levied at the incinerator.

(b) A notarized affidavit stating that the applicable local governments have been given at least thirty (30) days written notification of the pending application for a license.

(c) A certificate from the County Zoning Administrator that the use proposed is in accordance with the established County Zoning Ordinance.

(d) Sufficient documentation to enable the County Board to determine whether the applicant is financially and operationally capable to properly process and dispose of all solid waste.

(e) All of the same information required for review by the State rules administered by the Agency which presently apply only to incinerators with capacities greater than 6,000 pounds per hour.

(f) Such additional data and information as may be required by the Solid Waste Officer.

Subd. 4. During normal operation, the facility shall comply with the following requirements:

(a) Permanent records shall be maintained for County inspection as to the quantity of material incinerated, the total quantity of resulting residue and total hours of plant operation.

(b) Any discharges to the air, or to surface or ground waters of the state shall meet all applicable State rules for air and water quality or effluent standards now or hereafter adopted.

(c) All unloading and processing of solid wastes at the facility shall be conducted in such a manner as to prevent or eliminate odors and litter outside the facility.

SECTION VIII. INTERMEDIATE SOLID WASTE DISPOSAL FACILITIES.

Subd. 1. No intermediate solid waste disposal operation shall be constructed, established, maintained or operated unless the operator or owner thereof has first been issued therefor a license from the County Board and a permit from the Agency. The applicant shall meet all requirements for obtaining a license as specified in Section II of this ordinance. The application for a license shall contain the following information:

(a) Location, size, and ownership of land upon which the operation will be situated.

(b) General description of property use in the immediate vicinity of the operation.

(c) Complete construction plans and specifications and proposed operating procedures for the operation.

(d) Rates and charges to be imposed at the operation.

(e) A notarized affidavit stating that the applicable local governments have been given thirty (30) days written notification of the pending application for a license.

(f) Such additional data and information as may be required by the Solid Waste Officer.

Subd. 3. An intermediate solid waste disposal facility shall be constructed, operated, and maintained in compliance with the following requirements and State rules administered by the Agency.

(a) A sign shall be posted on the premises indicating the name of the operation, the days and hours during which it is open to the public, and user charges, if any. The sign shall be approved by the Solid Waste Officer.

(b) The premises shall be constructed and landscaped in such a manner as to be aesthetically pleasing in appearance.

(c) Sanitary facilities and shelter adequate for employees shall be provided on the premises.

(d) Records in a form acceptable to the Solid Waste Officer shall be maintained indicating the type and quantity of solid waste processed by the operation.

(e) The operation shall be located, equipped, operated and maintained in a manner which prevents the creation of a nuisance, or unsanitary condition.

(f) The premises' entrances and exits shall be maintained in a clean, neat and orderly manner at all times.

(g) All unloading of solid waste from contributing vehicles shall be conducted in such a manner as to prevent or eliminate odor and litter outside the facility.

SECTION IX. LICENSE FEES.

Approval by the County Board of an application for a license for a solid waste management facility shall be contingent upon the payment to the County of a license fee in the amount established by the County Board. The amounts of the license fees shall be based upon the cost to the County of processing the license applications and administering and enforcing this ordinance with respect to said licenses. The fees prescribed shall be paid by a license applicant for each facility maintained. Solid waste collector's and transporter's fees shall be paid annually as a condition for license renewal. Non-payment of the annual solid waste collector's or transporter's fee shall be ground for denial of license renewal. Fees shall be paid to the County Treasurer prior to issuance of licenses.

SECTION X. TERMINATION OF SOLID WASTE OPERATIONS.

Subd. 1. All land disposal operations licensed by the County shall be terminated in accordance with State rules administered by the Agency.

Subd. 2. The license of any operation in subd. 1 which has water monitoring wells or lysimeters which are reviewed by the County or the Agency to be sampled shall establish with the County an escrow account no later than one year from the effective date of this ordinance or five years prior to termination of the operation, whichever occurs sooner.

The purpose of the escrow account is to set aside adequate funds to continue the sampling required by the County or the Agency for a period of no less than 75 years from termination of the operation. The County Board shall specify by resolution the amount of money to be deposited in the account and the terms for payments which shall be made by the licensee to that account. Failure by the licensee to meet the escrow account conditions established by the County Board shall constitute a failure of the licensee to comply with the terms of this ordinance, thereby enabling the County to use the provisions of Section II. subd. 5 to make the necessary deposits to the escrow account.

Subd. 3. The County shall perform all long term monitoring required by the County or the Agency following termination or abandonment of all solid waste operations.

Subd. 2. The licensee of each solid waste operation shall inform the County Board in writing of a licensee's intent to abandon or terminate the operation. Such notice shall be provided in advance of the abandonment or termination date by the following amounts of time:

Land disposal operation	three years
Transfer station	one year
Incineration facility	three years
Collection/transportation service	one year
All other solid waste operations	<u>three (3) years</u>

Failure of a licensee to comply, for any reason, with the above advance notice requirements shall constitute a failure of the licensee to comply with the terms of this ordinance. The County Board may elect to pay all public and private higher-than-normal solid waste management costs which result from the premature cessation of a solid waste operation. The County may recover these costs through the provisions of Section II, subd. 5.

#### SECTION XI. VARIANCES.

Upon written application by the applicant or operator, the County Board may grant variances from the provisions of this ordinance in order to promote the effective and reasonable application and enforcement of the provisions of this ordinance. If such variance would result in noncompliance with Agency rules, a variance application must be filed with the Agency.

A variance may be granted by the County Board after a public hearing where the County Board determines that enforcement of this ordinance would cause the applicant undue hardship, or that the ordinance cannot be complied with due to technological impossibility or economic unreasonableness. Such a variance shall not be granted for a period in excess of two years, but may be renewed upon application by the applicant and after a public hearing is held. A variance may be revoked prior to expiration of the variance by the County Board at a public hearing. An application for a variance shall be accompanied by a plan and schedule for achieving compliance with the ordinance. Prior to any public hearing held by the County Board under this provision, persons who may be adversely affected by the granting of the proposed variance shall be given at least thirty (30) days notice to said public hearing. Publication of a notice of hearing in appropriate newspapers shall be considered adequate notice.

SECTION XII. NONCONFORMING SITES AND FACILITIES.

Solid waste management facilities in existence on the effective date of this ordinance shall conform to the provisions of this ordinance or terminate operations no later than 60 days from that date unless a variance application is submitted to the County Board within a sixty (60) day period following the effective date of this ordinance.

SECTION XIII. ADDITIONAL REQUIREMENTS.

For the purpose of protecting the public health, safety and welfare, the County Board may impose additional requirements consistent with the intent of this ordinance for the operation of solid waste management sites or facilities.

SECTION XIV. SEVERABILITY.

It is hereby declared to be the intention of the County Board that the several provisions of this ordinance be severable in accordance with the following.

Subd. 1. If any Court of competent jurisdiction shall adjudge any provision of this ordinance to be invalid, such judgment shall not affect any other provision of this ordinance not specifically included in said judgment.

Subd. 2. If any Court of competent jurisdiction shall adjudge invalid the application of any provision of this ordinance to a particular structure, site, facility or operation, such judgment shall not affect the application of said provision to any other structure, site, facility, or operation not specifically included said judgment.

SECTION XV. PROVISIONS ARE CUMULATIVE.

The provisions of this ordinance are cumulative limitations upon all other laws and ordinances heretofore passed or which may be passed hereafter, covering any subject matter of this ordinance.

SECTION XVI. NO CONSENT.

Nothing contained in this ordinance shall be deemed to be a consent, license or permit to locate, construct, operate or maintain any site, facility or operation, or to carry on any activity.

SECTION XVII. VIOLATIONS.

Subd. 1. Any person who violates or fails, neglects or refuses to comply with the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction thereof shall be

punished therefor as provided by Minnesota Statutes. A separate offense shall be deemed committed upon each separate day during or on which a violation occurs or continues.

Subd. 2. This ordinance, in addition to other remedies, may be enforced by injunction, action or compel performance or other appropriate action in District Court to prevent, restrain, correct or abate violations.

SECTION XVIII. OTHER ORDINANCES AND REGULATIONS.

Nothing in this ordinance shall preclude any local unit of government from adopting stricter regulations than this ordinance.

SECTION XIX. EFFECTIVE DATE.

This amended ordinance shall be in full force and effect from and after its passage and publication according to law.

Adopted this 22nd day of December, 1992.

SIBLEY COUNTY BOARD OF COMMISSIONERS

By: Don Schwicks  
Chairman of the Board

ATTEST:

Gene O. Johnson  
Auditor

**SIBLEY COUNTY  
SOLID WASTE MANAGEMENT  
SERVICE FEE ORDINANCE**

The County Board of Sibley County does Ordain:

**SECTION I: SERVICE CHARGE**

Subsection 1. Purpose and Authority

This section is enacted pursuant to Minnesota Statute 400.08 which grants Sibley County the authority to impose reasonable charges for solid waste management and disposal. The purpose of this section is to establish a method of collection for such charges.

Subsection 2. Method of Billing and Collection Service Charge

Sibley County shall impose a service charge for solid waste management services provided to the various parcels of land in the County, and such charges may result in an assessment levy payable with the real estate taxes.

Subsection 3. Unpaid Charges

On or before October 15th in each year, the County Board shall certify to the County Auditor all unpaid outstanding charges and a description of the lands against which the charges arose. It shall be the duty of the County Auditor, upon order of the County Board, to extend the assessments with interest rate provided or in Minnesota Statutes Section 279.03, Subdivision 1, upon the tax rolls of the County for the taxes of the year in which the assessment is filed. For each year ending October 15th, the assessment with interest shall be carried into the tax becoming due and payable in January of the following year, and shall be enforced and collected in the manner provided for the enforcement and collection of real property taxes in accordance with the provisions of the laws of the State. The charges, if not paid, shall become delinquent and be Subject to the same penalties and the same rate of interest as the taxes under the general laws of the State.

Subsection 4. Rates and Charges

The County Board, by resolution, may establish or revise the rate schedule for solid waste management services. All rates and charges shall be uniform in their application to use and service of the same character and quantity. A copy of the current rate schedule shall be kept on file in the Office of the County Auditor. If no new rate schedule for solid waste management services is adopted in any year, the rate schedule for the previous year shall remain in effect.

In establishing or revising the rate schedule, the Board may take into account all factors relevant to solid waste management and disposal. Such factors include, but are not limited to, the character, kind and quality of service and of solid waste, the method of disposition, the number of people served at each place of collection, and all other factors that enter into the cost of providing service including, but not limited to, public education, recycling programs, solid waste management facilities operating and debt service cost.

Subsection 5. Tax Exempt Properties

Unpaid charges may be collected in Small Claims Court or through such other means as may be approved by the County Attorney.

Subsection 6. Appeals

Any property owner who believes that the service charge imposed upon his property is incorrect, may appeal the charge. An appeal form may be obtained at the Office of the County Assessor, and shall be filed within 30 days of mailing the service charge statement by the County. The County Assessor shall, within 30 days of receipt of the appeal, review the appeal and notify the appellant by U.S. mail whether an adjustment is due and how much, or whether the appeal is denied.

**SECTION II: SERVICE AREA**

This section is enacted pursuant to Minnesota Statutes Section 400.08 which grants Sibley County the authority to establish and determine the boundaries of solid waste management service areas in the County. The boundaries of Sibley County shall constitute the boundaries of the solid waste management service area.

**SECTION III: EFFECTIVE DATE**

This ordinance amendment shall be in full force and effect following the adoption by the County Board of Commissioners and publication as required by law.

NOW, THEREFORE, BE IT RESOLVED that this ordinance is hereby adopted this 9th day of October, 1990.

IT IS ORDERED by the Board of County Commissioners that a full, true and correct copy of this ordinance shall be certified to by the County Auditor who shall forthwith file for record such certified copy of the Office of the Recorder of Sibley County; and the same shall be filed within the Auditor's Ordinance Book located in the Office of the County Auditor and published by the County Auditor as required by law.

SIBLEY COUNTY BOARD OF COMMISSIONERS:

Rueben Meyer  
Don Schweske  
Robert Bude  
Carl Baul  
Donald W. Becker

Attest: Gene O. Johnson, County Auditor

Published in the Gaylord Hub on October 18, 1990.

SOLID WASTE MANAGEMENT SERVICE FEE SCHEDULE

Annual Assessment - \$18 per unit

Adjustment Codes

Residential Units	1 to 4	@	100%
Apartment Bldg	over 4	@	75%
Mobile Home Parks (# of pads)		@	67%
Nursing Homes (# of beds)		@	50%
Seasonal - Mobile Homes		@	33%

Appeal Method of Special Assessment for Waste Management

- 1.) Abatement Form will be designed by the Assessor and the Auditor
- 2.) The abatement can be completed in person or by mail
- 3.) No abatement will be considered unless the first & second half real estate taxes are paid \*(See exception)
- 4.) The abatement will have a statement by the owner as to why he/she feels that this special assessment should not be placed on this property
- 5.) The Assessor will review each abatement and make a recommendation for approval or denial
- 6.) A listing of the abatements will be mailed to the County Commissioners prior to the meeting for review
- 7.) The County Commissioners will meet the first part of December to act on the list or the modified list
- 8.) Refunds would be made by the County Treasurer the end of December

\*Exception: In the case of the initial assessment the time for the appeal process will commence on November 9, 1990 and will terminate on December 10, 1990. All abatements granted by the County Board will be adjusted on the 1991 real estate taxes.

May 19, 1988, WMB

Plan Recommendation

**ADDENDUM - YARD WASTE COMPOSTING**

The 1988 Legislature made the following amendment to the Waste Management Act of 1980:

"(115A.936) (LAND DISPOSAL OF YARD WASTE.)

(a) Except as authorized by the agency, in the metropolitan area after January 1, 1990, and outside the metropolitan area after January 1, 1992, a person may not dispose of yard waste:

- (1) in mixed municipal solid waste;
- (2) in a disposal facility; or
- (3) in a resource recovery facility except for the purposes of composting or co-composting.

(b) Yard waste subject to this subdivision is garden wastes, leaves, lawn cuttings, weeds, and prunings."

The Minnesota Waste Management Board (WMB) has indicated that it will not issue certificate of need capacity for disposal of yard waste after January 1, 1992. In addition, the WMB has indicated that in the future county plans must recognize and address the new statewide yard waste management requirements in their county plans.

\_\_\_\_\_ County recognizes the new requirements and has amended its CON to reflect them concerning yard waste management, and intends to take the following steps to address the requirements.

PLAN RECOMMENDATION

Addendum - Ash Management Amendments

General The 1988 state legislature made significant amendments to the Waste Management Act concerning the proper management of solid waste incinerator ash. The purpose of these amendments is as follows:

(115A.97) (SPECIAL WASTE; INCINATOR ASH.) Subdivision 1.  
(POLICY; GOALS.) It is the policy of the legislature that mixed municipal solid waste incinerators be planned and managed to achieve to the maximum extent feasible and prudent:

- (1) reduction of the toxicity of incinerator ash;
- (2) reduction of the quantity of the incinerator ash; and
- (3) reduction of the quantity of waste processing residuals that require disposal.

The purpose of this section is to establish temporary and permanent programs to achieve these reduction goals."

To achieve their goals the legislature has allocated new ash management responsibilities among various interested parties.

The MPCA is directed to:

- adopt rules to establish techniques to measure the noncombustible fraction of mixed municipal solid waste prior to incineration or processing into refuse derived fuel and for at least the testing, management, and disposal of incinerator ash; and

- establish an interim program to test, monitor and store incinerator ash. (The program must include separate testing of fly ash, bottom ash, and combined ash if technically feasible.)

The WMB is required to:

- review county plans to ensure that they meet the new ash management goals and policy; and
- develop and propose statewide goals and timetables for the reduction of the noncombustible fraction of mixed municipal solid waste prior to incineration or processing into refuse derived fuel and for the reduction of the toxicity of the incinerator ash.
- the WMB may develop guidelines for counties to follow in meeting the goals of the legislation.

Counties whose plans propose incineration are required to: clearly state in their plans "how the county plans to meet the goals in subdivision 1 of reducing the toxicity and quantity of incinerator ash and of reducing the quantity of processing residuals that require disposal."

Incineration facility developers are required to:

- store ash separate from MSW with adequate controls to protect the environment; and
- state in permit applications how the applicant will achieve the goals of subdivision 1.

SOLID WASTE MANAGEMENT SERVICE FEE SCHEDULE

Annual Assessment - \$12 per unit

Adjustment Codes

Residential Units	1 to 4	@	100%
Apartment Bldg	over 4	@	75%
Mobile Home Parks (# of pads)		@	67%
Nursing Homes (# of beds)		@	50%
Seasonal - Mobile Homes		@	33%

Appeal Method of Special Assessment for Waste Management

- 1.) Abatement Form will be designed by the Assessor and the Auditor
- 2.) The abatement can be completed in person or by mail
- 3.) No abatement will be considered unless the first & second half real estate taxes are paid \*(See exception)
- 4.) The abatement will have a statement by the owner as to why he/she feels that this special assessment should not be placed on this property
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- 6.) A listing of the abatements will be mailed to the County Commissioners prior to the meeting for review
- 7.) The County Commissioners will meet the first part of December to act on the list or the modified list
- 8.) Refunds would be made by the County Treasurer the end of December

\*Exception: In the case of the initial assessment the time for the appeal process will commence on November 9, 1990 and will terminate on December 10, 1990. All abatements granted by the County Board will be adjusted on the 1991 real estate taxes.

**APPENDIX 6: CURRENT CONTRACT WITH WASTE MANAGMENT**  
**AGREEMENT FOR RECYCLING SERVICES BETWEEN**  
**THE TRI-COUNTY SOLID WASTE JOINT POWERS BOARD**  
**AND**  
**WASTE MANAGEMENT OF MINNESOTA,**  
**A DIVISION OF WASTE MANAGEMENT, INC**  
**EFFECTIVE: JANUARY 1, 2009**

This Recycling Services Agreement (“Agreement”) is made by and entered into between the Tri-County Solid Waste Joint Powers Board, a joint powers board established pursuant to Minnesota Statutes § 471.59, consisting of the counties of LeSueur, Nicollet, and Sibley, (“Tri-County”) and Waste Management of Minnesota, Inc., a subsidiary of Waste Management Inc. (“Contractor”).

The purpose of this Agreement is to provide recycling and waste reduction services to the residents, commercial establishments, municipalities, and all other entities that generate recyclable materials located within LeSueur and Sibley Counties (the “Counties”). The Contractor operates a recycling center (“Recycling Center”) located in LeSueur County. Contractor desires to receive, process and market the recyclable materials brought to the Recycling Center from the Counties.

Based upon the terms and conditions mutually agreed to and stated in this Agreement, and the consideration provided herein, the parties hereby agree as follows:

**Section 1. Term of Agreement**

1.1 This Agreement will commence on January 1, 2009 and will terminate on December 31, 2012.

1.2 This Agreement will automatically renew for an additional one (1) year term at the expiration of the initial term and upon termination of each renewal term unless either party notifies the other party in writing that it will not renew this Agreement. Written notice must be received One Hundred Twenty (120) days (including Saturdays, Sundays and holidays) prior to the expiration of the initial term or renewal term.

**Section 2. Facilities and Equipment**

2.1 The Contractor agrees to receive recyclable materials at the Recycling Center and to transport at its own expense recyclable materials to approved end markets for recycling and

marketing, and residuals from the recyclable materials to approved facilities for processing and resource recovery.

2.2 The Contractor shall provide, at its own expense, such other machinery and equipment as may be necessary to receive, store, process and transport the recyclable materials brought to the Recycling Center. The Contractor will keep all equipment used in performance of this Agreement in a clean, sanitary and mechanically sound condition.

2.3 The Contractor agrees to maintain a separate area so that residents of the Counties may drop off recyclable materials brought to the Recycling Center.

2.4 The Contractor shall have one (1) full time employee at the Recycling Center whose primary responsibility will be to direct and assist residential and commercial recycling customers. In addition, for unforeseen circumstances, there will be two (2) other full time employees at the site to assist customers.

### **Section 3. Recyclable Materials**

3.1 The following recyclable materials will be received at the Recycling Center at no charge to residents, commercial establishments, municipalities, or other entities within the Counties:

- Newspaper
- Corrugated cardboard
- Office and computer paper
- Aluminum and bi-metal food and beverage cans
- Steel/tin food and beverage cans
- Plastic, numbers 1 through 7 (with a neck)
- Glass food and beverage containers (clear, green, blue, and amber)
- Mixed paper
- Magazines and catalogues
- Textiles and old clothing
- Automobile batteries \*
- Household appliances \*
- Tires \*
- Electronics \*
- Yard waste \*

\* These materials are subject to the tipping fees established in the Operation Plan.

3.2 It is understood and agreed that recyclable materials will be accepted either as “source separated” or “two-sort,” as defined in the Operation Plan. Two-sort recyclables shall consist of (1) aluminum, bi-metal, steel and tin food and beverage containers; glass food and beverage containers; and # 1-7 plastic food and beverage containers received together, and (2) paper materials received together.

3.3 Recyclable materials may be added to or deleted from the list in Section 3.1 by the written agreement of the parties or as required by law.

3.4 The Contractor may process recyclable materials from other geographic locations at the Recycling Center as long as this does not interfere with the Contractor's performance under this Agreement.

**Section 4. Area to be Served**

4.1 The Contractor agrees to accept all recyclable materials identified in Section 3.1 that are delivered from generators in the Counties to the Recycling Center in conformance with the Operation Plan (Section 7), including from commercial haulers who pick up the materials from residences, businesses, and municipalities within the Counties.

4.2 Commercial haulers for residences, businesses, and municipalities in the Counties will deliver the recyclable materials in conformance with the Operations Plan.

4.3 The Contractor shall require all delivery vehicles to be weighed and shall keep accurate records of the tonnage and type of recyclable materials delivered and shall make this information available to Tri-County via the reports required in Section 8.

4.4 The Contractor shall accept delivery of recyclable materials by resident or commercial establishment located within the Counties and shall keep reasonable records on the type and tonnage of materials delivered by non-commercial haulers, and shall make this information available to Tri-County via the reports required in Section 8.

**Section 5. Processing and Marketing of Recyclable Materials**

5.1 The Contractor shall process and market recyclable materials in conformance with state and county regulations and in a manner to obtain the most competitive price for the materials, consistent with the Operation Plan. The procedures for processing and marketing of recyclable materials are set forth in the Operation Plan.

5.2 No accepted recyclable materials covered by this Agreement shall be land filled without the prior approval of Tri-County and the required approval of the Director of the Minnesota Office of Environmental Assistance pursuant to Minn. Stat. § 115A.95.

**Section 6. Facility Operation**

6.1 Hours of operation for the Recycling Center shall be:

Commercial Haulers and General Public:  
Monday through Friday 8:00 a.m. to 5:00 p.m.  
Saturday 8:00 am. to 12:00 noon

6.2 The Contractor agrees to keep the building, grounds, storage containers and outside drop-off areas in a well maintained, clean, safe, and nuisance free condition.

6.3 All complaints received by the Contractor will be given prompt and courteous attention

## **Section 7. Operation Plan**

7.1 The Operation Plan shall include, but is not limited to, facility operation and maintenance, the required preparation for acceptance of recyclable materials, information system requirements, plans for processing and marketing of materials, staff training and safety planning, and tipping fees for automobile batteries, household appliances, tires, electronics, and yard waste. The Operation Plan is incorporated by reference into this Agreement.

7.2 The Operation Plan may be revised as needed by the mutual written consent of the Contractor and Tri-County.

## **Section 8. Records and Reports**

8.1 The Contractor shall prepare and maintain proper, accurate and complete records and accounts of all transactions related to the Recycling Center. These records shall include but are not limited to, insurance, regulatory inspection reports, recyclable materials received, visitor logs, equipment replacement, safety and accident reports, quantity and type of recyclable materials processed, quantity and type of recyclable materials delivered to markets, and prices received for all recyclable materials sold.

8.2 The quantity of recyclable materials processed will include a breakdown by tonnage and type of recyclable materials for each municipality in the Counties and each rural drop box location in the Counties.

8.3 All records shall be made available to Tri-County, its staff, and its agents, and to the staff of the Counties during reasonable business hours upon request.

8.4 Information obtained as a result of an examination of the records shall be treated as non-public, confidential information to the extent provided by law, and will not be disclosed to third parties, other than the Counties. However, Tri-County reserves the right to use such information as needed to meet state or federal reporting requirements, and to disclose such information to comply with state or federal law.

8.5 The Contractor shall send monthly reports and monthly billings to the Tri-County Solid Waste Director. All monthly payments will be contingent on the receipt of the monthly reports and billings. The monthly reports and billings by the Contractor are due by the 30th of the month (by the 28<sup>th</sup> in February) and must include, but are not limited to, the following:

(1) The tonnage of each recyclable material brought by residents to the Recycling Center each month. This information shall be reported for each municipality within the Counties, and shall also be reported for each rural drop box location.

(2) The tonnage of each recyclable material brought by haulers from commercial establishments, municipalities, and all other entities to the Recycling Center. This information shall

be reported for each municipality within the Counties, and shall also be reported for each rural drop box location.

(3) By commodity, the average price for the quantity sold, the dates sold, and the markets used as provided in Section 9.

Monthly reports are necessary for Tri-County’s records and for reports to the State as required by statute.

8.6 At the request of the Tri-County Director, the Contractor shall segregate and visually inspect one load of commingled recyclables from each municipality and rural drop box in the Counties. A report will be submitted and will provide Tri-County with the breakdown of recyclable materials for each municipality.

8.7 In the event the Contractor fails to submit monthly reports in a timely manner, an economic penalty of two percent (2%) of the monthly fee due to the Contractor will be assessed and deducted from the monthly fee for each seven (7) day period that the report is delayed. This economic penalty is in addition to Tri-County withholding payment of the monthly fee until the monthly report is received at the Tri-County Office. Tri-County may waive the economic penalty if it determines that the delay was caused by circumstances beyond the Contractor’s control.

**Section 9. Payment for Recycling Services and Revenue Pass-Back**

9.1 The Tri-County shall compensate the Contractor monthly for the proper completion of services as specified in this Agreement within thirty (30) days after receipt of the Contractor’s acceptable monthly reports. The base monthly fee for processing services shall be Six Thousand Three Hundred Ninety Dollars and Fourteen Cents (\$6,390.14). The base monthly fee shall be adjusted annually according to the annual percentage change of the prior year’s Consumer Price Index: Urban Midwest, Not Seasonally Adjusted (“CPI-U Midwest”). However, in no event shall the annual percentage adjustment to the base fee exceed four percent (4%).

9.2 The Tri-County agrees to pay Contractor an additional fee if diesel fuel increases to a dollar amount equal to or above \$3.00 per gallon. If diesel fuel remains below \$3.00 per gallon, the fuel surcharge will be 0 percent. If diesel fuel is at or above \$3.00 per gallon the following percentages will apply to Contractor’s base rate.

<b>Diesel Fuel Price per Gallon</b>	<b>Fuel Surcharge</b>
<\$3.00	0 Percent
\$3.00 to \$3.24	2 Percent
\$3.25 to \$3.49	4 Percent
\$3.50 and \$3.75	5 Percent
For every \$0.25 per gallon increase above \$3.75	The Fuel Surcharge will increase by 1%

The published index for determining monthly diesel fuel prices will be the Department of Energy's (DOE) "Weekly Retail On-Highway Diesel Prices" for the Midwest region. The price published for the first Monday of the month will be used as that month's diesel fuel price. The prices can be viewed at the DOE's website: <http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp>.

Depending on the market conditions the Tri-County may share in the proceeds from the sale of recyclable materials. Target prices for recyclable commodities listed under this Agreement are as follows [one (1) ton shall equal two thousand (2,000) pounds]:

Tin	\$60.00 per ton
Aluminum	\$900.00 per ton
Clear glass	\$45.00 per ton
Brown glass	\$45.00 per ton
Green glass	\$20.00 per ton
Corrugated cardboard	\$35.00 per ton
Newsprint	\$20.00 per ton
Mixed paper	\$20.00 per ton
Ledger paper	\$80.00 per ton
Textiles	\$50.00 per ton
Commingled plastics	\$60.00 per ton
Natural colored HDPE Plastic	\$379.00 per ton
Colored HDPE Plastic	\$261.00 per ton
PET Plastic	\$262.00 per ton

When market prices exceed these target prices for any given commodity, Tri-County and the Contractor will share [sixty percent (60%) for Tri-County and forty percent (40%) for Contractor] the difference per ton between the target price and the current market price for the commodities collected from the Counties. This revenue pass-back will be returned to Tri-County in the form of a rebate check from the Contractor. Target prices will remain the same throughout the term of this Agreement.

- 9.3 The Tri-County revenue pass-back will be rebated by the Contractor on a monthly basis within thirty (30) days after the end of each month. In the event the Contractor fails to submit monthly commodity reports pursuant to Section 9.4, or rebate checks in a timely manner, an economic penalty of 2 percent of the monthly fee due to the Contractor will be assessed and deducted from the monthly fee for each seven-day period that the commodity report or rebate check is delayed. This economic penalty is in addition to Tri-County withholding payment of the monthly fee until the commodity report or rebate check is received at the Tri-County office. Tri-County may waive the economic penalty if it determines that the delay was caused by circumstances beyond the Contractor's control.

9.4 Market indicators for revenue pass-back will be determined for “Fiber” by Official Board Markets, “The Yellow Sheet”. The Contractor will utilize the average “Yellow Sheet” pricing to determine the revenue pass-back. The Contractor will base revenue pass-back to the Tri-County for aluminum, glass containers, commingled plastic bottles, and tin cans based on the actual price paid by the various markets. On a monthly basis the Contractor will include with the billing statement a summary of the actual average pricing for each of the corresponding materials. This report will be generated by the Waste Management Recycling Service Center (RSC), the commodity marketing division of Waste Management. For any materials marketed locally, a copy of the sales receipts indicating market value and the weight ticket for the commodity will be provided.

9.5 All recyclable materials received by the Contractor become the property of the Contractor.

9.6 The Contractor shall deliver residuals in an amount equal in quantity and composition to the residuals derived from normal processing operations of Tri-County recyclables to the Minnesota Waste Processing Company Transfer Station located at 1051 Summit Avenue, Mankato, MN. The cost of the residuals will be the Contractor’s responsibility. Weight tickets shall be provided for the delivery of all residuals.

**Section 10. Access to Site and Maintenance Reports**

The Contractor agrees to allow Tri-County staff, its agents, and staff from the Counties access to inspect the Recycling Center, including interviewing of Contractor’s staff, and interviewing and inspection of commercial haulers and residents using the Recycling Center.

10.2 The Contractor shall submit a copy of the facility inspection report as well as any site maintenance records and corrective action plans on a monthly basis along with the monthly report.

**Section 11. Permits and Licenses**

The Contractor shall obtain all applicable state, county and municipal permits and licenses required to operate the Recycling Center and shall comply with all applicable regulations pertaining to the operation of the Recycling Center.

**Section 12. Public Education and Tri-County Special Collection Events**

The Contractor will provide containers, transportation, and disposal services for Tri-County special event collections up to four (4) times annually at a cost to the Tri-County Solid Waste Office of:

- Delivery and Removal of Containers:\$0.00
- Transportation to Disposal Site: \$59.00 per hour  
(For one man/one vehicle)
- Disposal: \$ Cost only  
(Including applicable taxes)

### **Section 13. Performance Bond**

The Contractor shall furnish Tri-County with an annual performance bond, in a form acceptable to Tri-County's legal counsel, in the amount of the total contract price to ensure Contractor compliance with all obligations in this Agreement.

### **Section 14. Liability Insurance**

The Contractor will provide evidence, in a form satisfactory to Tri-County's legal counsel, that it has liability insurance with limits of not less than \$600,000 per person and \$2,000,000 per occurrence for claims against the Contractor, the Tri-County Board, the individual counties comprising the Tri-County Board and the employees of any of these entities arising from the acts or omissions of the Contractor or its employees. Such insurance shall include coverage for general liability, automobile/truck liability and worker's compensation. The Contractor shall keep this liability insurance in force at all times this Agreement is in effect.

### **Section 15. Liability**

The Contractor hereby agrees to indemnify, save and hold harmless Tri-County, the three counties comprising Tri-County and all of its agents and employees of and from any and all claims, demands, actions, or causes of action arising out of any act or omission of the Contractor, its agents or employees in fulfilling the terms, or conditions of this Agreement. Further, the Contractor agrees to defend, at its own cost, the expense of any action or proceeding commenced for the purpose of asserting any claim arising as a result of the terms or conditions set forth in this Agreement.

### **Section 16. Assignment**

No part of this Agreement may be sold, transferred, assigned, or sublet by the Contractor without the express, prior written consent of Tri-County. If the corporate ownership of Waste Management of Minnesota or Waste Management, Inc. changes during the period of this Agreement, the Contractor is required to provide written notice to the Tri-County Solid Waste Office within thirty (30) days of the ownership transfer. In such event, Tri-County will have One Hundred Twenty (120) days from the date of this notice (including Saturdays, Sundays and holidays) to exercise its sole option of terminating this Agreement.

### **Section 17. Severability**

The invalidity of any portion of this Agreement shall not be deemed to affect the validity of any other provisions. In the event that any provision is held invalid, the parties agree that the remaining provisions shall be deemed in full force and effect as if they had been executed by both parties subsequent to the deletion of the invalid provision.

**Section 18. Amendments to the Agreement**

The terms and conditions of this Agreement may be amended or modified at any time by written mutual agreement signed by each party or the authorized representative of each party.

**Section 19. Cancellation and Termination**

Either party may terminate this Agreement for a material breach of the Agreement by the other party after giving written notice of the breach and allowing the other party thirty (30) days to correct the breach to the satisfaction of the complaining party.

**Section 20. Notice**

Any notice required to be given by this Agreement shall be in writing, signed by the party giving the notice and shall be transmitted by personal delivery, facsimile, or registered mail, return receipt requested and postage pre-paid. Notice shall be effective when delivered, transmitted by facsimile, or mailed. Notice shall be sent to the last known address of the party. When notice is required to be given by a certain number of days, Saturdays, Sundays, and holidays are to be counted. Notice must be sent to the following addresses unless the parties submit a change of address.

Tri-County: Director/Secretary, Tri-County Solid Waste Board, Sibley County Courthouse Annex, Second Floor, P.O. Box 238, Gaylord, MN 55334

WMM: District Manager, Waste Management of Minnesota, P.O. Box 336, Mankato, MN 56002-0336.

**Section 21. Applicable Law and Venue**

This Agreement is entered into and governed by the laws of the State of Minnesota. Any legal actions arising from this Agreement shall be disputed in Minnesota District Court, First District.

**Section 22. Entire Agreement**

This Agreement shall constitute the entire Agreement between the parties and any prior understanding or representation of any kind preceding the date of this Agreement shall not be binding upon either party except to the extent incorporated into this Agreement.

In witness thereof, the authorized representatives of the parties hereto have executed this Agreement as dated, intending to be bound by its terms.

**CONTRACTOR**

Rick Roemer, District Manager  
Waste Management of Minnesota

Date

**TRI-COUNTY SOLID WASTE BOARD**

Joe Doherty, Le Sueur County Commissioner  
Chairperson, Tri-County Solid Waste Board

Date

Al Christensen, Tri-County Director and  
Secretary, Tri-County Solid Waste Board

Date

## REFERENCES

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- <sup>1</sup> Sibley County Soil Survey, 1997, U.S. Dept. of the Interior, 1967 cited in Sibley County Comprehensive Local Water Plan  
[http://www.co.sibley.mn.us/sibleycounty/uploads/Sibley\\_County\\_Water\\_Plan\\_2002.pdf](http://www.co.sibley.mn.us/sibleycounty/uploads/Sibley_County_Water_Plan_2002.pdf) Accessed July 25, 2013
- <sup>2</sup> Le Sueur County Land Use Plan (2007).  
<http://www.co.lesueur.mn.us/environmentalservices/Le%20Sueur%20County%20Land%20Use%20Plan%202007.pdf> Accessed July 30, 2013
- <sup>3</sup> Le Sueur County Land Use and Cover Statistics - Minnesota Geospatial Information Office  
<http://www.lmic.state.mn.us/cgi-bin/datanetweb/landuse?cnty=40&topic=P&area=C&map=n&stats=y> Accessed July 29, 2013
- <sup>4</sup> Nicollet County Land Use and Cover Statistics - Minnesota Geospatial Information Office  
<http://www.lmic.state.mn.us/cgi-bin/datanetweb/landuse?cnty=52&topic=P&area=C&map=n&stats=y>. Accessed July 10, 2013
- <sup>5</sup> Sibley County Comprehensive Plan  
[http://www.co.sibley.mn.us/sibley\\_county\\_comprehensive\\_plan.html](http://www.co.sibley.mn.us/sibley_county_comprehensive_plan.html) Accessed July 31, 2013
- <sup>6</sup> Sibley County Land Use and Cover Statistics - Minnesota Geospatial Information Office  
<http://www.lmic.state.mn.us/cgi-bin/datanetweb/landuse?cnty=72&topic=P&area=C&map=n&stats=y> Accessed July 29, 2013
- <sup>7</sup> MN State Demographic Center. 2012. Population of Cities and Townships  
<http://www.demography.state.mn.us/estimates.html>. Accessed August, 13, 2013
- <sup>8</sup> MN DEED. 2013. Minnesota Unemployment Statistics LAUS (Local Area Unemployment Statistics) Data  
<http://www.positivelyminnesota.com/apps/lmi/rws/Results.aspx?> Accessed August, 12, 2013
- <sup>9</sup> MN DEED. 2013. Business Employment Dynamics.  
<http://www.positivelyminnesota.com/apps/lmi/qcew/AreaSel.aspx> Accessed November, 28, 2012

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<sup>10</sup> MN DEED. 2013. Long-Term Occupation Projections.

<http://www.positivelyminnesota.com/apps/lmi/rws/Results.aspx?> Accessed May 22, 2013

<sup>11</sup> Greater MN data from SWMCB 2000 Minnesota Statewide MSW

<sup>12</sup> MPCA 2011 SCORE reports for residential and commercial recycling

<sup>13</sup> McLeod County MMSW Report and MSW origin data from the SRRMF