

SAINT LOUIS COUNTY  
**ENVIRONMENTAL**  
**SERVICES**  
*BETTER WASTE SOLUTIONS*

*Meeting Your Waste Material  
& Septic System Needs*

**Solid Waste Management Plan**

**June 21, 2013**

## Table of Contents

<b>Section 1</b>	<b>Executive Summary</b>	<b>1</b>
<b>Section 2</b>	<b>Background Information</b>	<b>5</b>
2.1	Demographic, geographic and regional information	5
2.2	Solid waste collection and generation	10
2.3	Construction and demolition debris	19
2.4	Major solid waste generators	20
2.5	Solid waste planning history	21
<b>Section 3</b>	<b>Existing Integrated Solid Waste Management System</b>	<b>23</b>
3.1	Policies and Goals	23
3.2	History of the Development of the System to Present	24
3.3	Description of existing resource recovery programs or facilities presently in use	26
3.4	Description of land disposal facilities in use	26
3.5	Costs associated with operating and maintaining the system	26
3.6	Summary of achievements and challenges. Recycling and Special Wastes	26
<b>Section 4</b>	<b>Proposed Integrated Solid Waste Management System</b>	<b>28</b>
4.1	Goals	28
4.2	Objectives	28
4.3	Landfill disposal system	29
<b>Section 5</b>	<b>Solid Waste Reduction</b>	<b>32</b>
5.1	General Policy and Goals	32
5.2	Existing Solid Waste Reduction Practices	32
5.3	Specific Programs To Be Developed	33
5.4	Program Budget	34
<b>Section 6</b>	<b>Waste Education</b>	<b>34</b>
6.1	General Policy and Goals	34
6.2	Existing Solid Waste Education Practices	34
6.3	Specific Programs To Be Developed	35
6.4	Program Budget	35
6.5	Schedule of Implementation (new programs)	36

<b>Section 7</b>	<b>Recycling .....</b>	<b>36</b>
7.1	General Policy and Goals .....	36
7.2	Existing Recycling Practices .....	36
7.3	Programs To Be Implemented .....	40
7.4	Responsible Person.....	40
7.5	Program Budget.....	41
7.6	Schedule of Implementation .....	41
<b>Section 8</b>	<b>Yard Waste Management.....</b>	<b>41</b>
8.1	General Policy and Goals .....	41
8.2	Existing Programs.....	41
8.3	Specific Programs to Be Developed .....	43
8.4	Program Budget.....	43
8.5	Schedule of Implementation .....	43
8.6	Environmental Impacts of Yard Waste Management.....	44
<b>Section 9</b>	<b>Source-Separated Organic Materials Composting.....</b>	<b>44</b>
<b>Section 10</b>	<b>Mixed Municipal Solid Waste Composting .....</b>	<b>44</b>
<b>Section 11</b>	<b>Solid Waste Incineration and Energy Recovery.....</b>	<b>44</b>
<b>Section 12</b>	<b>Land Disposal of Mixed Municipal Solid Waste.....</b>	<b>45</b>
12.1	General Policy and Goals .....	45
12.2	Existing Program .....	45
12.3	Environmental and Public Health Impacts .....	50
12.4	Specific Programs to Be Developed .....	52
12.5	Responsible Person.....	52
12.6	Program Budget.....	53
12.7	Schedule of Implementation .....	53
<b>Section 13</b>	<b>Waste Tire Disposal and Recovery.....</b>	<b>53</b>
13.1	Policy and Goals.....	53
13.2	Existing Waste Tire Practices .....	53
13.3	Specific Programs to Be Developed .....	54
13.4	Estimated Program Budget.....	54
13.5	Implementation Schedule .....	54

<b>Section 14</b>	<b>Electronic Products</b> .....	<b>55</b>
14.1	General Policy and Goals .....	55
14.2	Existing Electronic Products Management Practices.....	55
14.3	Specific Programs to be Developed .....	55
14.4	Program Budget.....	55
<b>Section 15</b>	<b>Major Appliance and Scrap Metal Management</b> .....	<b>56</b>
15.1	General Policy and Goals .....	56
15.2	Existing Appliance and Scrap Metal Management Practices .....	56
15.3	Specific Programs to Be Developed .....	57
15.4	Program Budget.....	57
15.5	Implementation Schedule .....	57
<b>Section 16</b>	<b>Automotive Mercury Switches, Motor Vehicle Fluids and Filters, and Lead-Acid and Dry Cell Batteries Management</b> .....	<b>57</b>
16.1	General Policy and Goals .....	57
16.2	Existing Automotive Mercury Switch, Motor Vehicle Fluids and Filters, and Lead-acid and Dry Cell Battery Programs and Practices .....	58
16.3	Specific Programs to be Developed .....	59
16.4	Program Budget.....	59
<b>Section 17</b>	<b>Household Hazardous Waste and Very Small Quantity Generator (VSQG) Hazardous Waste Management</b> .....	<b>60</b>
17.1	General Policy and Goals .....	60
17.2	Existing Programs and Practices .....	60
17.3	Specific Programs to be Developed .....	62
17.4	Program Budget.....	62
<b>Section 18</b>	<b>Construction and Demolition Debris</b> .....	<b>63</b>
18.1	General Policy and Goals .....	63
18.2	Existing Construction and Demolition Debris Practices Program.....	63
18.3	Specific Programs to be Developed .....	64
18.4	Program Budget.....	64
18.5	Schedule of Implementation .....	65
<b>Section 19</b>	<b>Salvaging and Reuse</b> .....	<b>65</b>
19.1	General Policies and Goals.....	65
19.2	Existing Program.....	65

19.3	Responsible Person.....	66
19.4	Program Budget.....	66
<b>Section 20</b>	<b>Solid Waste Ordinance.....</b>	<b>66</b>
20.1	Ordinance Status .....	66
20.2	Implementation and Enforcement Issues .....	66
20.3	Planned Amendments .....	66
20.4	Responsible Person.....	67
20.5	Program Budget.....	67
<b>Section 21</b>	<b>Solid Waste Staff .....</b>	<b>67</b>
21.1	Existing Staff .....	67
21.2	Staffing Needs .....	68
<b>Section 22</b>	<b>Solid Waste Program Funding.....</b>	<b>68</b>
22.1	Policies and Goals .....	68
22.2	Existing Solid Waste Funding Practices .....	68
22.3	Amounts and Sources of Funding.....	69
<b>Section 23</b>	<b>Plan Review and Ten-Year Plan .....</b>	<b>69</b>
23.1	Plan Development Time Line.....	69
23.2	Plan Development Process .....	69
23.3	Responsible Person.....	69
23.4	Program Budget.....	69
<b>Section 24</b>	<b>Goal-Volume Table .....</b>	<b>70</b>
<b>Section 25</b>	<b>Itemized Solid Waste Budget .....</b>	<b>70</b>
25.1	Annual Department Budget Development Activities .....	70
25.2	Itemized Solid Waste Budget for Long Term Planning.....	70
<b>Section 26</b>	<b>Alternatives to Proposed System .....</b>	<b>71</b>
26.1	Short-term Alternatives.....	71
26.2	Long-term Alternatives.....	71
<b>Section 27</b>	<b>On-site and Illegal Disposal (Environmental and Public Health Impacts) .....</b>	<b>72</b>
27.1	On-site Disposal .....	72

27.2	Illegal Disposal.....	72
27.3	Responsible Person.....	73
27.4	Program Budget.....	73
<b>Section 28</b>	<b>Solid Waste Facility Siting Program .....</b>	<b>73</b>
28.1.....		73
28.2.....		73
28.3.....		73
<b>Section 29</b>	<b>Public Participation and Citizen's Advisory Committee.....</b>	<b>73</b>

<b>Figure 1</b> .....	<b>1</b>
<b>MSW Waste Destinations (MnTAP 2013)</b> .....	<b>1</b>
<b>Figure 2</b> .....	<b>2</b>
<b>Ten Year MSW Generation Forecast</b> .....	<b>2</b>
<b>Figure 3</b> .....	<b>3</b>
<b>Integrated Solid Waste Management System Objectives</b> .....	<b>3</b>
<b>Figure 4</b> .....	<b>5</b>
<b>St Louis County Solid Waste Management Area</b> .....	<b>5</b>
<b>Figure 5</b> .....	<b>6</b>
<b>St. Louis County Population Distribution 2010 Census</b> .....	<b>6</b>
<b>Figure 6</b> .....	<b>7</b>
<b>Size of St. Louis County</b> .....	<b>7</b>
<b>Figure 7</b> .....	<b>11</b>
<b>Facilities Map</b> .....	<b>11</b>
<b>Figure 8</b> .....	<b>21</b>
<b>St. Louis County Environmental Services Department</b> .....	<b>21</b>

<b>Table 1</b> .....	<b>4</b>
10 year Budget Forecast.....	4
<b>Table 2</b> .....	<b>6</b>
St. Louis County SWMA Census Population 1970 - 2010.....	6
<b>Table 3</b> .....	<b>7</b>
St. Louis County SWMA Population and Households Projections.....	7
<b>Table 4</b> .....	<b>8</b>
St. Louis County Solid Waste Management Area .....	8
<b>Table 5</b> .....	<b>9</b>
SWMA Employment and wages .....	9
<b>Table 6</b> .....	<b>11</b>
St. Louis County SWMA Waste Generation Estimates* .....	11
<b>Table 7</b> .....	<b>14</b>
Large Waste Collectors - 2012 .....	14
<b>Table 8</b> .....	<b>14</b>
St. Louis County-Licensed Waste Collectors – 2012.....	14
<b>Table 9</b> .....	<b>18</b>
St. Louis County SWMA MSW Waste Stream Characteristics - 2013 .....	18
<b>Table 10</b> .....	<b>20</b>
St. Louis County SWMA Demolition Waste Disposal Estimates .....	20
<b>Table 11</b> .....	<b>20</b>
Large Waste Generators - 2012.....	20
<b>Table 12</b> .....	<b>31</b>
Area Landfills and Availability - 2012 .....	31

<b>Table 13</b> .....	<b>36</b>
<b>Schedule of Implementation of New Programs</b> .....	<b>36</b>
<b>Table 14</b> .....	<b>37</b>
<b>Recycling Tonnages</b> .....	<b>37</b>
<b>Table 15</b> .....	<b>41</b>
<b>Proposed Recycling Implementation Schedule</b> .....	<b>41</b>
<b>Table 16</b> .....	<b>46</b>
<b>St. Louis County Regional Landfill Permitting Activity</b> .....	<b>46</b>
<b>Table 17</b> .....	<b>47</b>
<b>St. Louis County Regional Landfill tonnages: 1993 - 2012</b> .....	<b>47</b>
<b>Table 18</b> .....	<b>53</b>
<b>Proposed Landfill Program Implementation Schedule</b> .....	<b>53</b>
<b>Table 19</b> .....	<b>64</b>
<b>Demolition Landfills in St. Louis County SWMA</b> .....	<b>64</b>
<b>Table 20</b> .....	<b>65</b>
<b>Proposed Demolition Material Program Implementation Schedule</b> .....	<b>65</b>
<b>Table 21</b> .....	<b>69</b>
<b>2013 Budget - Revenue by Source</b> .....	<b>69</b>

<b>Appendix A.....</b>	<b>75</b>
<b>Goal-Volume Table.....</b>	<b>75</b>
<b>Appendix B.....</b>	<b>88</b>
<b>Budget .....</b>	<b>88</b>
<b>Appendix C.....</b>	<b>89</b>
<b>Facility Services and Hours of Operation .....</b>	<b>89</b>
<b>Appendix D.....</b>	<b>91</b>
<b>Tipping Fees .....</b>	<b>91</b>
<b>Appendix E.....</b>	<b>93</b>
<b>Solid Waste Ordinance 45.....</b>	<b>93</b>
<b>Appendix F.....</b>	<b>142</b>
<b>Recycling Information .....</b>	<b>142</b>



The Department has worked strategically over the past 20 years to develop and maintain a mature waste management system focused on landfill abatement through resource recovery of recyclable materials and special wastes, reuse programs, backyard composting, and public education. The challenge going forward is to maintain and expand these programs in an efficient and cost effective manner while serving an aging and potentially shrinking population base.

During the next ten years the County will continue to provide an integrated waste management system focused on landfill abatement which includes:

- A minimum of 46 recycling drop-off sites
- A recycled materials processing facility
- Processing of recyclables collected by local units of government through curbside or drop off recycling
- Support for other private or school-related recycling programs
- A demolition waste collection and management program
- Extensive special waste collection services for used antifreeze, appliances, lead acid batteries, brush and yard waste, mattresses and box springs, motor oil, scrap metal, tires and electronics
- Household Hazardous waste facilities and collections and an associated reuse store
- A municipal solid waste (MSW) collection network which currently includes 5 transfer stations and 18 canister sites
- A Subtitle D MMSW landfill with leachate treatment and land application site

Over the past 25 years St. Louis County has spent significant time and effort in analysis of resource recovery technologies for utilization of solid wastes generated within the SWMA. Section 3.2 of this plan outlines these efforts to date. The Department will continue to evaluate additional resource recovery options but is challenged by low waste volumes and lower than average median area income to fund large-scale waste recovery infrastructure. Section 4 discusses efforts that the Department will take to improve efficiencies in our current integrated solid waste management system. In addition to those planning efforts, emphasis will be placed on adding materials to the existing recycling stream, electronics recovery, back yard organics composting, and additional public education efforts.

Over the term of this 10-year solid waste management plan, municipal solid waste generation is expected to remain relatively static as exhibited in Figure 2 below.

**Figure 2**  
Ten Year MSW Generation Forecast

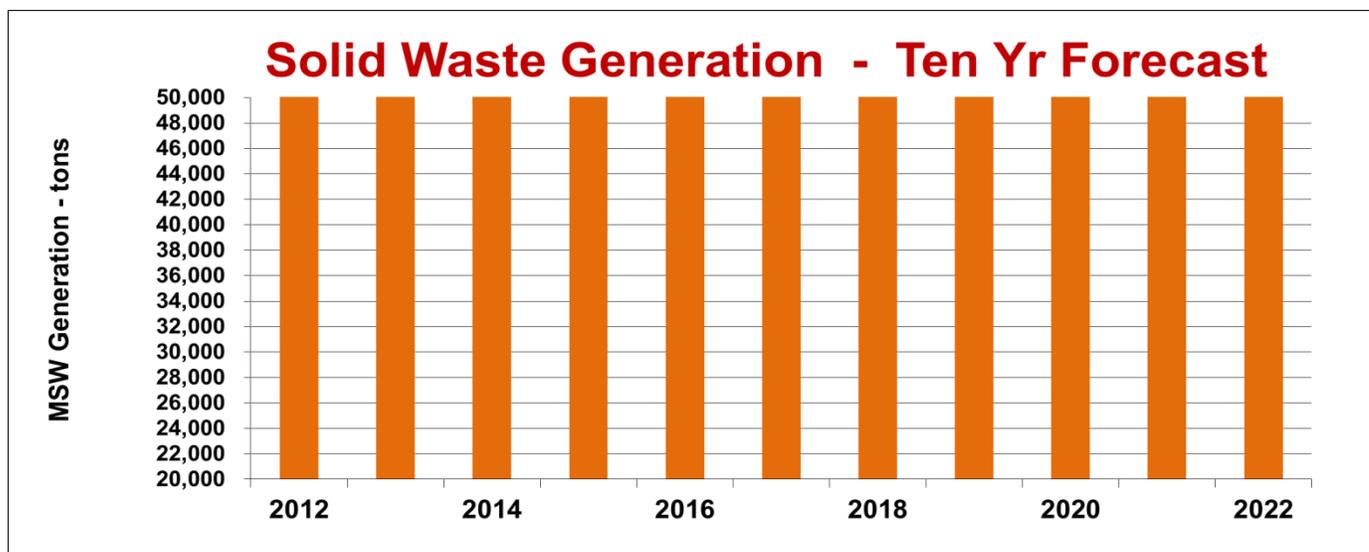
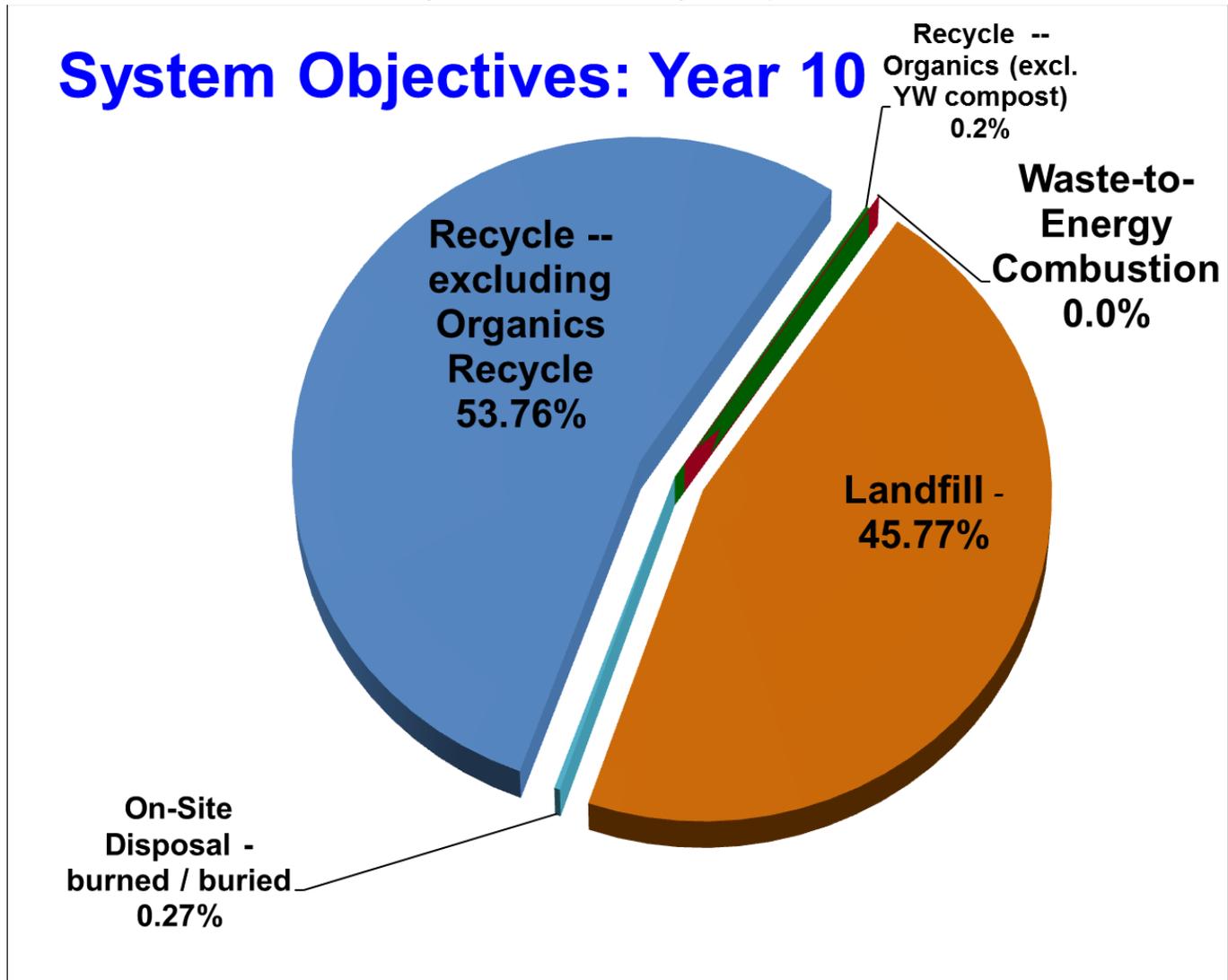


Figure 3 illustrates the breakdown of planned recycling, composting, problem materials and MSW management requirements for the period of this plan. The Goal Volume Table in Appendix A details the predicted volumes by waste type and planned landfill space needs for permitting. The Goal Volume Table indicates that St. Louis County will require 757,900 cubic yards Certificate of Need (CON) for MSW disposal at the Regional Landfill during this planning period.

**Figure 3**  
Integrated Solid Waste Management System Objectives



The 10-year budget for solid waste management during this planning period reflects the stability in waste recovery and disposal tonnages. However, the Department is prepared to handle expected replacement and upgrades to systems and equipment over the term of this plan. Table 1 is a synopsis of expected expenses and revenue for the next 10 years. Table 1 is also found in Appendix B.

**Table 1**  
**10 year Budget Forecast**

St. Louis County Environmental Services 10 Year Solid Waste Budget												
<b>Expenses</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
Landfill <sup>1</sup>	\$ 1,601,907	\$ 704,743	\$ 701,038	\$ 3,227,459	\$ 1,884,008	\$ 700,688	\$ 837,502	\$ 2,734,452	\$ 601,541	\$ 778,772	\$ 886,147	\$ 14,658,257
Waste Transfer <sup>2</sup>	\$ 755,578	\$ 770,689	\$ 786,103	\$ 801,825	\$ 817,861	\$ 834,219	\$ 850,903	\$ 867,921	\$ 885,280	\$ 902,985	\$ 921,045	\$ 9,194,409
Processing	\$ 25,469	\$ 25,978	\$ 26,498	\$ 27,028	\$ 27,568	\$ 28,120	\$ 28,682	\$ 29,256	\$ 29,841	\$ 30,438	\$ 31,047	\$ 383,375
Demolition Material <sup>3</sup>	\$ 328,406	\$ 336,014	\$ 343,290	\$ 352,836	\$ 362,453	\$ 372,142	\$ 383,905	\$ 398,743	\$ 408,658	\$ 418,651	\$ 428,724	\$ 4,133,823
Special Wastes <sup>3</sup>	\$ 38,000	\$ 45,760	\$ 39,535	\$ 60,326	\$ 41,132	\$ 41,955	\$ 42,794	\$ 43,650	\$ 44,523	\$ 45,414	\$ 46,322	\$ 489,411
HHW <sup>3</sup>	\$ 72,000	\$ 73,440	\$ 136,403	\$ 76,407	\$ 77,935	\$ 79,494	\$ 81,084	\$ 82,706	\$ 84,360	\$ 86,047	\$ 87,768	\$ 937,644
Recycling <sup>3</sup>	\$ 740,200	\$ 713,404	\$ 939,372	\$ 741,410	\$ 766,238	\$ 771,362	\$ 786,790	\$ 802,526	\$ 853,576	\$ 834,948	\$ 851,646	\$ 8,801,471
Administration <sup>4</sup>	\$ 4,281,243	\$ 4,684,100	\$ 4,671,338	\$ 3,503,656	\$ 4,394,823	\$ 4,978,041	\$ 4,973,871	\$ 4,265,553	\$ 5,366,512	\$ 5,339,180	\$ 5,505,831	\$ 51,964,149
<b>Total Expenses</b>	<b>\$ 7,842,803</b>	<b>\$ 7,354,129</b>	<b>\$ 7,643,578</b>	<b>\$ 8,790,947</b>	<b>\$ 8,372,019</b>	<b>\$ 7,806,021</b>	<b>\$ 7,985,531</b>	<b>\$ 9,224,806</b>	<b>\$ 8,274,290</b>	<b>\$ 8,436,434</b>	<b>\$ 8,758,530</b>	<b>\$ 90,489,089</b>
<b>Revenue</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
Tipping Fees	\$ 2,524,054	\$ 2,582,611	\$ 2,865,140	\$ 2,988,045	\$ 3,114,840	\$ 3,245,644	\$ 3,370,180	\$ 3,498,974	\$ 3,632,158	\$ 3,704,132	\$ 3,777,762	\$ 35,303,540
Services Fees	\$ 2,459,007	\$ 2,471,389	\$ 2,483,834	\$ 2,496,344	\$ 2,508,918	\$ 2,521,557	\$ 2,534,261	\$ 2,547,030	\$ 2,559,865	\$ 2,572,766	\$ 2,585,734	\$ 27,740,703
Recycling Revenue	\$ 510,000	\$ 520,200	\$ 530,604	\$ 541,216	\$ 552,040	\$ 563,081	\$ 574,343	\$ 585,830	\$ 597,546	\$ 609,497	\$ 621,687	\$ 6,206,045
Special Waste Revenue	\$ 20,808	\$ 21,224	\$ 21,649	\$ 22,082	\$ 22,523	\$ 22,974	\$ 23,433	\$ 23,902	\$ 24,380	\$ 24,867	\$ 25,365	\$ 253,207
Grant funding and stipend	\$ 502,000	\$ 502,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 5,477,000
Licensing	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 101,475
Other	\$ 180,993	\$ 167,458	\$ 159,504	\$ 151,598	\$ 133,618	\$ 121,168	\$ 115,819	\$ 110,126	\$ 93,314	\$ 87,437	\$ 80,869	\$ 1,401,902
Fund balance contribution	\$ 1,636,717	\$ 1,080,023	\$ 1,076,622	\$ 2,085,437	\$ 1,533,854	\$ 825,372	\$ 861,271	\$ 1,952,720	\$ 860,802	\$ 931,510	\$ 1,160,889	\$ 14,005,217
<b>Total Revenue</b>	<b>\$ 7,842,803</b>	<b>\$ 7,354,129</b>	<b>\$ 7,643,578</b>	<b>\$ 8,790,947</b>	<b>\$ 8,372,019</b>	<b>\$ 7,806,021</b>	<b>\$ 7,985,531</b>	<b>\$ 9,224,806</b>	<b>\$ 8,274,290</b>	<b>\$ 8,436,434</b>	<b>\$ 8,758,530</b>	<b>\$ 90,489,088</b>
<b>Per Capita</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
Expenses	\$ 92	\$ 87	\$ 90	\$ 104	\$ 99	\$ 92	\$ 94	\$ 109	\$ 98	\$ 100	\$ 103	\$ 1,068
Revenue	\$ 92	\$ 87	\$ 90	\$ 104	\$ 99	\$ 92	\$ 94	\$ 109	\$ 98	\$ 100	\$ 103	\$ 1,068
Net	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Per Household</b>	<b>2,013</b>	<b>2,014</b>	<b>2,015</b>	<b>2,016</b>	<b>2,017</b>	<b>2,018</b>	<b>2,019</b>	<b>2,020</b>	<b>2,021</b>	<b>2,022</b>	<b>2,023</b>	<b>TOTAL</b>
Expenses	\$ 155	\$ 146	\$ 151	\$ 174	\$ 166	\$ 155	\$ 158	\$ 183	\$ 164	\$ 167	\$ 174	\$ 1,794
Revenue	\$ 155	\$ 146	\$ 151	\$ 174	\$ 166	\$ 155	\$ 158	\$ 183	\$ 164	\$ 167	\$ 174	\$ 1,794
Net	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1. includes operations, financial assurance, development, engineering and construction costs, leachate systems												
2. includes transfer station and canister site capital expenses and operations												
3. includes capital and program expenses												
4. includes staff and other expenses												

Expected large capital expenses during this planning period include:

- Landfill engineering and construction
- Leachate field expansion and upgrades
- Landfill leachate recirculation and gas collection and management activities
- Replacement and upgrades of recycling equipment
- Replacement of solid waste transfer equipment

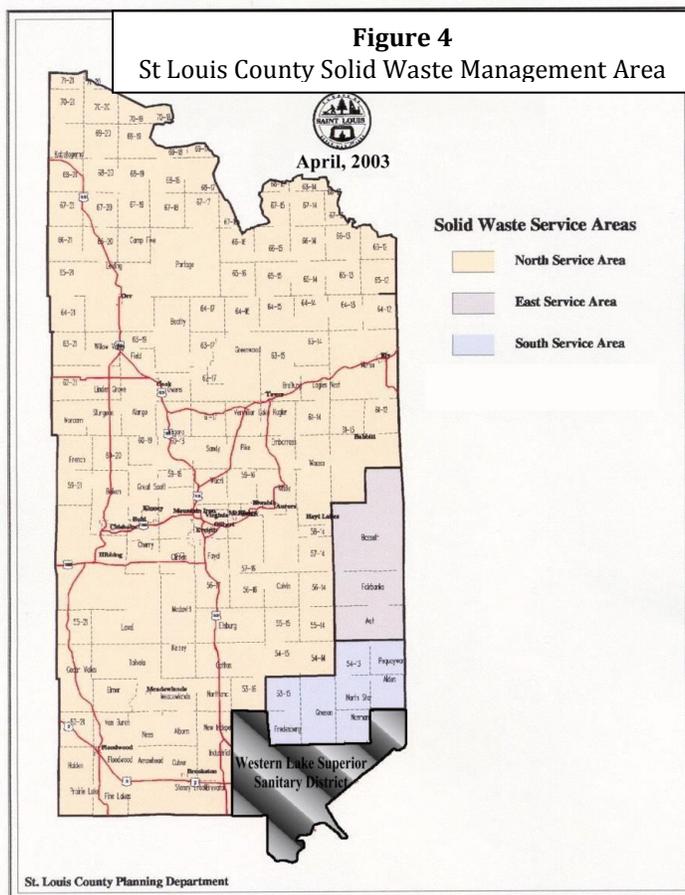
The County has maintained the same MSW tipping fee rates since 1995. These rates will undergo review during this planning period. Increased tipping fees will continue to be recommended to the County Board to maintain funding levels to cover increased program and capital expenses. Development of additional waste processing and recovery infrastructure will continue to be reviewed during the next 10 years, but is not planned nor budgeted during this planning period.

The scope of this Comprehensive Solid Waste Management Plan reflects the stable, mature integrated solid waste management system that St. Louis County has developed over the past 20 years. Minor changes are planned and will be made to facilitate efficiencies, new technologies and addition waste abatement over the next 10 years. This plan details the history, current status and future of solid waste management within the St. Louis County Solid Waste Management Area.

## Section 2 Background Information

### 2.1 Demographic, geographic and regional information

#### A. Current Population Distribution and projections for the next ten years.



Solid Waste programs throughout St. Louis County are managed by two separate and distinct entities. The St. Louis County Environmental Services Department (Department) provides an integrated program for residents and businesses throughout the majority of the geographic area of the county. The St. Louis County Solid Waste Management Area (SWMA) includes regions designated as the North Service Area, the East Service Area and the South Service Area. The Western Lake Superior Sanitary District (WLSSD) manages the area of the county which includes the Cities of Duluth, Hermantown and Proctor and surrounding townships. In 2001 the Department developed a formalized agreement for solid waste services for six townships within the SWMA which lie north of Duluth. Under the agreement WLSSD provides services to, and is paid from service fees, hauler-collected fees and SCORE revenues for these townships. For the purpose of this Solid Waste Management Plan, when the terms “County” or “SWMA” are used only information pertinent to that portion of

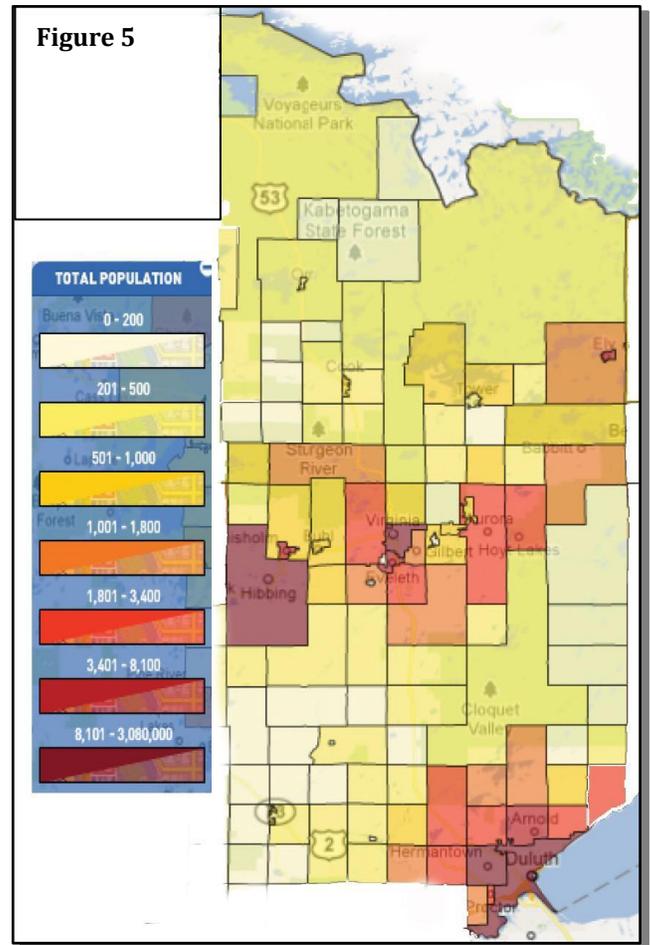
St. Louis County under the jurisdiction of the Department, including these six townships, will be addressed unless otherwise noted.

The population of St. Louis County SWMA in 1990 was 85,733 and 89,550 in 2000. Census 2010 shows the population for cities and townships served by the Department as 84,984. The number of households in 2010 was 50,038. Census 2010 information indicates that the average household size was 1.7 persons.

The majority of the County is very lightly populated. The SWMA's 2010 population density is estimated to be approximately 13 persons per square mile. This compares to a density of 28 for the County as a whole, and compares to 180 for the area of the County served by WLSSD. The average population density for the State of Minnesota is 62 persons per square mile. Special consideration must be given to the low population density when evaluating and developing County solid waste management programs for the large geographic area of St. Louis County.

St. Louis County also hosts a large number of visitors throughout the year. The permanent SWMA population of approximately 85,000 increases to an estimated 125,000 persons during peak tourism periods. This necessitates the seasonal expansion of recycling and waste management programs within the county.

Table 3 presents St. Louis County SWMA 1970, 1980, 1990, 2000 and 2010 populations and the percentage change that occurred during each census period. The SWMA population has fluctuated over the past 40 years (see Table 3.)



St. Louis County Population Distribution 2010 Census

Table 2									
St. Louis County SWMA Census Population 1970 - 2010									
Census Year	1970	1980	% Change	1990	% Change	2000	% Change	2010	% Change
SWMA Total	95959	102947	+ 7.28	85733	-16.72	89550	+ 4.45	84984	-5.1

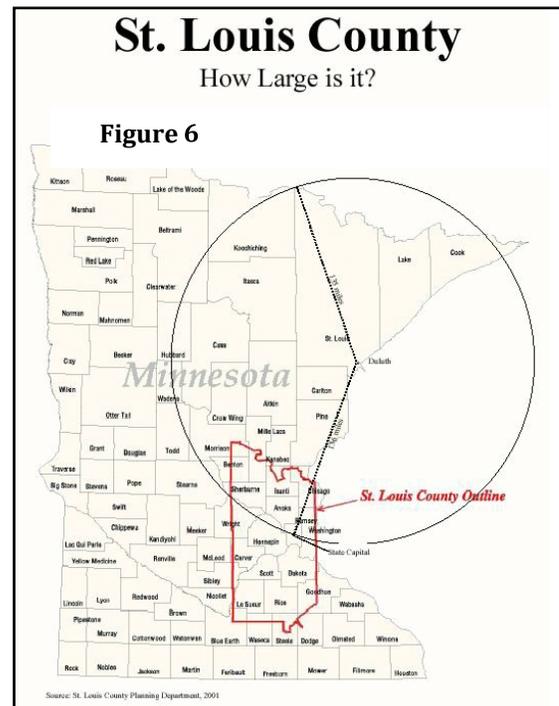
The permanent population of the SWMA is projected in this plan to remain relatively constant over the next 10 years. Table 4, located below, presents the St. Louis County SWMA's population projections for the ten year period of 2012 to 2022. Over the past 20 years there was a slight shift from the cities to the lake area townships such as Greenwood and Beatty, and to the southwest rural townships. Transfer station and canister site hours were adjusted accordingly.

Table 3											
St. Louis County SWMA Population and Households Projections											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Pop.	84984	84941	84897	84854	84811	84768	84724	84681	84368	84595	84638
Hhds	50560	50534	50508	50483	50457	50431	50405	50380	50354	50328	50354

In addition, St. Louis County is expecting to see an increase in the average age of its population in the SWMA. In 1990, the average age of residents in St. Louis County was 34.5 years. In 1995, the average age was 37 years; in 2000 it was 42 years. The 2010 Census notes the average age of the SWMA being 49. Special consideration must be given to the needs of an aging population when planning future County solid waste programs.

### B. Current and projected land use patterns

St. Louis County is located in the Northeast Area of the state. The map in Figure 5 shows the County's location in Minnesota as well as its size compared to other Minnesota counties. The County SWMA is 6,476 square miles in area and includes 20 cities, 78 organized townships and 44 unorganized townships. The largest population settlements are the Hibbing – Chisholm area, with a population of approximately 22,031 and the Quad Cities (Eveleth, Gilbert, Mt. Iron, and Virginia) with a population of approximately 17,868. These settlements are located approximately 200 miles north of the Twin Cities Metropolitan Area.



Size of St. Louis County

Land use in the SWMA is zoned predominantly Forest Agricultural Management District (FAM). Zoning classifications and acreage for the St. Louis County SWMA are shown in Table 5.

<b>Table 4</b>			
<b>St. Louis County Solid Waste Management Area</b>			
<b>Total Acres and Percentages of Each Zone</b>			
<b>Zone</b>	<b>Description</b>	<b>Acres</b>	<b>Percent</b>
COM	Non-Shoreland Commercial	1,872	.05
FAM	Forest Agricultural Management District	2,465,545	71.39
IND	Industrial	82,568	2.39
LIU	Limited Industrial	669	.02
MUNS	Multiple Use Non-Shoreland	425,022	12.31
RES	Residential	145,419	4.21
SENS	Sensitive Areas	164,372	4.76
SMU	Shoreland Mixed Use	168,092	4.87
	Total	3,453,559	100.00

The St. Louis County Planning Department has experienced an overall decrease in land-use permits from 802 during 2008 to 642 during 2010<sup>1</sup> indicating a decrease in construction and demolition activities.

---

<sup>1</sup> Land Use Annual Report, St. Louis County, 2010. St. Louis County Planning Department.

### C. Current and projected Employment and Wages

Employment data for the County SWMA is presented in Table 6. The SWMA's population decreased by less than 1% from 2000 to 2010. The number of wage and salary jobs for the SWMA decreased by 10% to an average of 33,266<sup>2</sup> during 2011. There was a downward shift in the number of jobs in the government sector and the trades, mining, construction and hospitality sectors. An increase in employment in the education, health, financial and manufacturing sectors was also evident. The following table is a breakdown of the employment numbers and income for the SWMA.

	No. of Establishments	No. of Jobs	% of all jobs	Wages
<b>Federal Government</b>	<b>42</b>	<b>319</b>	<b>1.0</b>	<b>\$ 17,090,020.00</b>
<b>State Government</b>	<b>54</b>	<b>852</b>	<b>2.6</b>	<b>\$ 41,844,868.00</b>
<b>Local Government</b>	<b>138</b>	<b>4294</b>	<b>12.9</b>	<b>\$ 149,552,761.00</b>
<b>Private sector</b>	<b>2334</b>	<b>27801</b>	<b>83.6</b>	<b>\$ 1,147,694,148.00</b>
Construction	336	1391	4.2	\$ 62,363,248.00
Education and Health Services	208	5836	17.5	\$ 232,986,258.00
Financial Services	213	1471	4.4	\$ 53,161,289.00
Leisure and Hospitality	330	3100	9.3	\$ 36,932,575.00
Manufacturing	217	4492	13.5	\$ 231,939,926.00
Natural Resources and Mining	74	3299	9.9	\$ 271,117,951.00
Professional and Business Services	204	1681	5.1	\$ 67,757,802.00
Trade, Transportation and Utilities	569	5527	16.6	\$ 167,263,292.00
Other	183	1004	3.0	\$ 24,171,807.00
<b>Total</b>	<b>2568</b>	<b>33266</b>		<b>\$ 1,356,181,797.00</b>

St. Louis County expects the employment outlook in the SWMA to remain relatively constant over the next 10 years.

The Department's business and industrial waste reduction and recycling efforts will focus much of its attention on the local government, manufacturing, education and health sectors, which comprise 44% of the employment within the County SWMA. Staff will provide technical assistance, in addition to waste reduction and education information. A partnership with the Minnesota Technical Assistance Program will leverage Department staff time for this effort.

The Department staff must also take into consideration the special needs of proposed businesses and industries which may choose to locate within the County when formulating or expanding its solid waste programs.

<sup>2</sup> Minnesota Workforce Center ([www.mnwfc.org](http://www.mnwfc.org)) unemployment statistics for St. Louis County and the City of Duluth.

#### **D. Local and regional economic conditions**

The 2011 estimated the median per capita income in St. Louis County SWMA is \$50,800. This compares with the 2011 median income in the State of Minnesota of \$67,699, and the federal median of \$64,525 as reported by the Minnesota Department of Employment and Economic Development. At the time this plan was written, 2012 information was not available.

The number of jobs in the SWMA increased steadily between 1992 and 2000 from 33,156 to 37,183. There was a 10% drop in the number of jobs in 2010 to 33,266. Emerging employers in social and health services, manufacturing, and business services have helped provide stability as trades, mining and construction have seen a downward trend.

The unemployment rate for the County SWMA in 1996 was 5.9%. The rate dropped to a low of 3.3% by October, 2000, but had risen to 9.0% by May, 2001 due to closure of some major mining and industrial employers. It has since decreased to 8.8% at the 2010 Census and to 6% by the end of 2011. The Minnesota Job Service considers unemployment rates for St. Louis County normal between 3.0 percent and 6.0 percent. As the mining and industrial workforce shifts to trades, manufacturing and education and health related occupations, the Department projects unemployment rates to stay within the normal range during the next ten years.

#### **E. Summary of demographic, geographical and regional constraints and opportunities that either have impacted or may impact the existing or proposed integrated solid waste management system.**

Non-ferrous mining permits are being processed for a number of sites within the SWMA. While these permitting processes will be moving forward during this next 10 year planning period, it is unlikely that significant changes in demography and employment will be realized during this time.

While the employment/unemployment situation in the SWMA has historically been cyclical, there do not appear to be indicators that would bode of a significant increase in population or jobs that would pose unwarranted changes to the needs for integrated solid waste management.

## **2.2 Solid waste collection and generation**

### **A. Estimate of the amount of solid waste generated annually within the Solid Waste Management Area**

In 2012, the St. Louis County SWMA generated approximately 120,000 tons of solid waste, or approximately 329 tons of solid waste per day (365 days). This includes 68,000 tons of recyclables and 52,000 tons of MSW. This does not include the additional 13,300 tons of industrial waste and asbestos materials; 1,900 tons of public utilities coal ash; and 8,000 tons of demolition waste managed through County programs. Future Department abatement goals and projected solid waste generation rates are a part of the Goal-Volume Table (GVT). The GVT located in Appendix A of the plan estimates a 2013 per-capita solid waste generation rate for the SWMA of 7.75 pounds per person per day. Table 7 shows 2012-2022 waste generation estimates from the Goal-Volume table.

**Table 6**

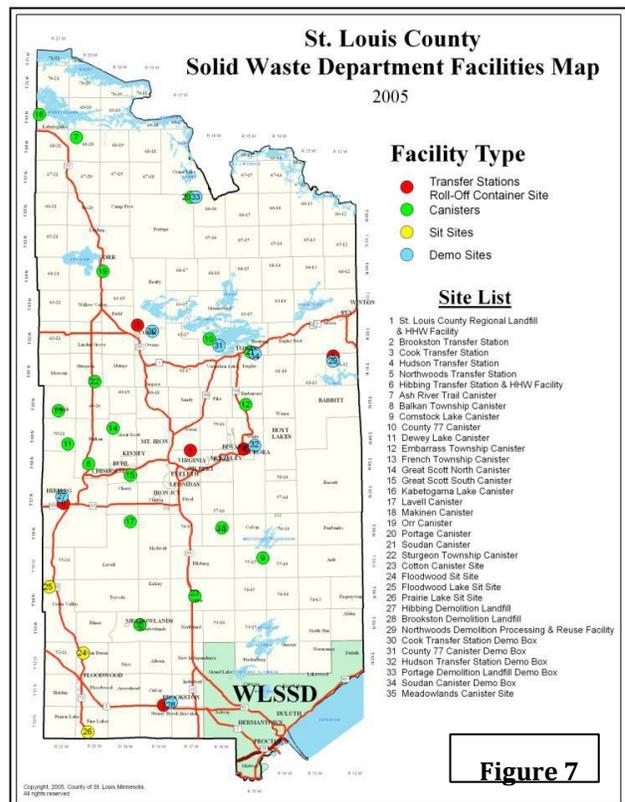
**St. Louis County SWMA Waste Generation Estimates\***

Solid waste generation	2012 Tons	2013 Tons	2014 Tons	2015 Tons	2016 Tons	2017 Tons	2018 Tons	2019 Tons	2020 Tons	2021 Tons	2022 Tons
Residential Recycling	14945	14409	14401	14394	14387	14379	14372	14365	14956	14948	14956
Commerical Recycling	47791	42025	42020	41983	41961	43138	43116	43094	43072	43050	44269
Organics composted	115	120	120	120	240	240	240	239	239	239	239
MSW to Landfill	52007	57935	57899	57867	57709	56466	56436	56406	55775	55745	54575
On-site MSW disposal	343	342	342	341	340	339	336	332	329	325	321
Problem materials recycled	5074	5085	5085	5085	5091	5098	5100	5102	5104	5106	5108
<b>Total MSW generated</b>	<b>120,794</b>	<b>120,732</b>	<b>120,670</b>	<b>120,608</b>	<b>120,546</b>	<b>120,485</b>	<b>120,424</b>	<b>120,363</b>	<b>120,302</b>	<b>120,241</b>	<b>120,302</b>

\* Excludes demolition materials and industrial wastes.

**B. Estimate of the percentages of City and rural residents with solid waste collection service**

Waste collection in the SWMA as a whole is not mandatory. The cities of Chisholm, Eveleth, Gilbert, Hibbing, Mt. Iron and Virginia have mandatory municipal collection. The cities of Aurora, Hoyt Lakes, Cook, Biwabik, and Babbitt have mandatory collection with contracted services. County staff estimates that roughly 99 percent of permanent city residents and 50 percent of the permanent rural residents use haulers. In addition to traditional route collection, the Department contracts with local licensed waste haulers in south St. Louis County to “sit” at a designated location allowing residents to deliver their MSW to the hauler. This “sit site” collection occurs



**Figure 7**

Facilities Map

weekly in Prairie Lake. Users of the “sit site” are charged a per bag disposal fee for the service. In total, it is estimated that the entire SWMA population is served by a hauler or has reasonable access to self-haul their waste to a County landfill, transfer station, “sit” site, or canister site.

### **C. Estimate of the annual percentage of solid waste disposed of on-site by generators**

Considering the sparsely populated, rural nature of large areas of the SWMA, all residents have reasonably convenient access to solid waste disposal and recycling facilities. The sites listed above are well maintained and have been selected to provide convenient disposal locations. SWMA residents are given the opportunity to provide input into site locations and the days and hours of site operation. All MSW sites have attendants to collect tipping fees and assist customers. The Department works to provide clean, convenient disposal sites, and customer service oriented attendants to encourage proper disposal and minimize illegal disposal activities. In addition to the self-haul options listed above, most residents have collection services available to them provided by licensed garbage haulers.

To further encourage proper disposal, the County also allows for the free disposal of major appliances (2 per load), automobile and small truck tires (4 per load), used automobile oil filters (6 per load), four foot fluorescent tubes and compact fluorescent bulbs (6 per load), scrap metal, automobile batteries, antifreeze, waste oil, brush and branches and yard waste. These free disposal items are accepted at all sites equipped to accept these waste types (see Appendix C - Solid Waste Facilities Services/Hours of Operation).

In spite of the above disposal options and reasonable tipping fees, some illegal disposal of solid waste still occurs. The remote location of large areas of the County, forested lands, large tracts of public property, and abundant road network make it relatively easy to dispose of solid waste illegally.

During 2012 it is estimated that approximately 343 tons of MSW was burned, buried, or otherwise illegally dumped on private or public property. This calculation is found in the GVT located in Appendix A and is based on a generation rate of approximately 0.3% of the total MSW generation.

### **D. Solid waste collection and disposal rate structure, including the current range of residential collection rates, the current range of commercial/industrial collection rates, and financial incentives for waste reduction and recycling**

The average St. Louis County SWMA household generated 2,452 pounds of non-recycled MSW and spent approximately \$114 for County solid waste services (recycling, special wastes and MSW disposal costs) in 2012. Municipal or private hauler fees would add to this amount. Tipping fees for in-SWMA generated MSW are based on \$45.63 per ton including the Solid Waste Management Tax. Residents of the SWMA North Service Area also pay a service fee of \$58 per year for a year-round property parcel.

MSW generated outside the SWMA and brought into the County program is assessed a higher tipping fee of \$106.99 per ton including taxes and surcharges. This higher fee allows the County to recoup program and facility costs which in-SWMA waste generators cover via the service fee.

St. Louis County's 2012 in-service area and out-of service area tipping fee rates for various materials, based on weight or volume in cubic yards, can be found in Appendix D.

Residential and commercial solid waste is collected by both private and municipal haulers. The rates haulers charge varies depending upon the location in the County and other factors. Haulers are not required to submit their rates as a condition of licensure; however, a competitive atmosphere exists due to the large number of haulers within the County. Solid waste haulers are required to base their rates on weight or volume of waste collected, regardless of whether the waste is collected from residences, businesses or industries.

A 2010 survey showed that the average household is billed \$16.63 to \$18.48 per month in the cities with municipal collection based on disposal of 30 gallons per week. This includes fees for haulage, tipping fees and recycling. Rates municipalities charge for commercial collection vary based on the business's location, size, volume of waste generated, and number of collections per week. These rates vary substantially from municipality to municipality. In addition, the municipalities within the SWMA have a different base volume for smaller commercial generators. As a comparison of similar volume rates, the City of Eveleth charges \$37 per month, Virginia charges \$60 per month and Mt. Iron charges \$42.50 per month for weekly pick up of 300 gallons. The City of Hibbing charges \$17.03 per cubic yard which calculates to \$89.91 per month for weekly pick up of 300 gallons. Rates from private haulers were not available due to a reluctance by the haulers to provide that information.

The County allows all SWMA generators to self-haul their own waste. Most cities have mandatory residential and commercial garbage pickup. As a result, residents and businesses in the cities typically do not self-haul MSW.

The primary financial incentive for waste reduction and recycling is the tipping fee. Residents, businesses, and industries are aware that they can avoid tipping fees by reducing the amount of waste they generate and by reusing or recycling as much of their waste stream as possible. The County is permitted to reuse certain industrial wastes as alternative daily and intermediate cover material in the landfill. This includes approximately 3,600 tons per year of spent foundry sand which the County utilizes as non-waste cover material.

St. Louis County SWMA's six largest waste collectors and the volumes and types of waste they transport are presented in Table 8 below.

<b>Collector Name</b>	<b>Annual tonnage of waste Collected</b>	<b>Types of Waste Collected</b>
City of Hibbing	30,034 tons	Private & Commercial MSW
City of Virginia	5,049 tons	Private & Commercial MSW
G-Men	3,105 tons	MSW
Waste Management	2,124 tons	MSW
Udovich Sanitation	2,100 tons	MSW
City of Eveleth	2,003 tons	Private and Commercial

Most solid and industrial waste collected in the St. Louis County SWMA is disposed of at the St. Louis County Regional Landfill (52,007 tons MSW and 13,892 ISW in 2012). Approximately 1,350 tons of MSW from the six townships north of Duluth is hauled by private collectors to WLSSD and transferred to Superior, Wisconsin. A very small quantity of waste collected from the Brimson area located in the east-central part of the County is delivered to WLSSD via Lake County. This quantity is estimated at about 233 tons per year.

There are currently 36 County-licensed haulers serving the SWMA. These include 29 private and seven municipal haulers. The type of accounts they serve and the areas they serve are listed in Table 9.

<b>Hauler Name</b>	<b>Account Types Served</b> (residential, commercial and/or industrial)	<b>Areas Served</b> (by township or municipality)	<b>Collection Offered</b> (MSW, recycling, yard waste, appliance, demo debris, etc.)
A-1 Disposal	residential, commercial	Floodwood/Brookston area	MSW, recycling
AEI Clean Sweep		Virginia area	
Burntside Lodge		Ely area	

**St. Louis County-Licensed Waste Collectors – 2012**

<b>Hauler Name</b>	<b>Account Types Served</b> (residential, commercial and/or industrial)	<b>Areas Served</b> (by township or municipality)	<b>Collection Offered</b> (MSW, recycling, yard waste, appliance, demo debris, etc.)
City of Chisholm	residential, commercial	City of Chisholm	MSW, yard waste*, appliances*
City of Eveleth	residential, commercial	City of Eveleth	MSW, recycling, appliances*, demo*, yard waste*
City of Gilbert	residential, commercial	City of Gilbert	MSW, recycling, appliances, yard waste
City of Hibbing	residential, commercial	City of Hibbing (except rural portion)	MSW, recycling, appliances*
City of Mt. Iron	residential, commercial	City of Mt. Iron	MSW, recycling, appliances*
City of McKinley	residential, commercial	City of McKinley	MSW, appliances, yard waste
City of Virginia	residential, commercial	City of Virginia	MSW, recycling, appliances*
Cloquet Sanitary/North Country Waste & Recycling	residential, commercial	Brookston Service Area	MSW
Countryside Sanitation	residential, commercial	Silica and other areas South of Hibbing	MSW
Crist Garbage Service	residential, commercial	Brookston Service Area	MSW
East Mesabi Sanitation	residential, commercial	Hudson (Aurora) Service Area	MSW
Eddie's Range Roll-Off Service		Mt. Iron Area	
Ely Shovel & Broom		Ely Area	
G Men, Inc.	residential, commercial	Northwoods Service Area	MSW, appliances**
General Waste Disposal & Recovery		Chisholm Area	

**St. Louis County-Licensed Waste Collectors – 2012**

<b>Hauler Name</b>	<b>Account Types Served</b> (residential, commercial and/or industrial)	<b>Areas Served</b> (by township or municipality)	<b>Collection Offered</b> (MSW, recycling, yard waste, appliance, demo debris, etc.)
Hartel's DBJ Disposal Companies	residential, commercial	Proctor Area	
Hiti Sanitation	residential, commercial	East Mesabi Service Area	MSW, demolition**
JL Logging	residential, commercial	East Mesabi Service Area	MSW
The Local Boy, Inc.		Grand Rapids Area	
Nordic Waste Services, Inc.		Duluth Area	
Norland Sanitary Service	residential, commercial	Brookston Service Area	MSW
North Shore Sanitary	residential, commercial	Southeast Service Area	MSW, recycling
North State Services	Residential, commercial	Cloquet Area	
Northern Minnesota Recycling		Virginia Area	
Northern Routes Rolloff		Ely Area	
Paul Berens Trucking, Inc.		Babbitt Area	
Rod's Roll-Off, LLC		Virginia Area	
Sanitation Services		Hibbing Area	
Udovich Garbage Service	residential, commercial	Cook Service Area	MSW, recycling
Veit	demolition rejects	Hibbing	MSW
Vermilion Trail Sanitation	residential, commercial	Northwoods (Ely) Service Area	MSW
Waste Management	residential, commercial	Hibbing/East Mesaba Service Area	MSW, recycling, demolition, appliances**, yard waste**

Solid waste collectors are required to have a Solid Waste Collection and Transportation license. The license fee must be submitted to St. Louis County annually. This license is administered through the Department. A fee of \$50 per business plus \$25 per vehicle used by the business for collection and/or haulage is charged for the license. As a provision of licensure, all licensed solid waste haulers must employ volume-based pricing.

#### **E. Description of the composition of the overall solid waste generated in the county**

The St. Louis County Regional Landfill participated as a study site for the R. W. Beck MSW Composition Study for the Solid Waste Management Coordinating Board. Using waste composition information from that study, the following table demonstrates the composition of MSW and recycled/recovered materials in the County solid waste system. It does not include industrial or demolition materials.

**Table 9****St. Louis County SWMA MSW Waste Stream Characteristics - 2013**

Material	2013 Amount Available (TPY)	% of Waste Landfilled (2)	% of Total Waste Stream
Paper - Recyclable	10,104	19.10%	7.45%
Paper - Non-Recyclable	5,184	9.80%	3.82%
Plastic - Recyclable	635	1.20%	0.47%
Plastic - Non-Recyclable	5,449	10.30%	4.02%
Non-recycled Ferrous Metals	3,174	6.00%	2.34%
Non-recycled Aluminum	741	1.40%	0.55%
Non-recycled other metals	106	0.20%	0.08%
Glass - Recyclable	1,164	2.20%	0.86%
Glass - Non-recyclable	265	0.50%	0.19%
Organic Materials (food, textiles, wood)	9,417	17.80%	6.94%
Electronics and batteries	1,746	3.30%	1.29%
Treated wood	1,217	2.30%	0.90%
HHW in landfilled waste	582	1.10%	0.43%
Other wastes landfilled	13,120	24.80%	9.67%
Waste to Landfill Subtotal	52,902	100.00%	38.99%
Recycled Paper - mixed (1)	5,558		4.10%
Recycled OCC(1)	6,412		4.73%
Recycled Aluminum(1)	669		0.49%
Recycled Ferrous(1)	1570		1.16%
Recycled Other mixed metals(1)	62,098		45.77%
Recycled Glass(1)	770		0.57%
Recycled Plastics - containers (1)	509		0.38%
Recycled Plastics - other(1)	105		0.08%
Recycled Organics (1)(3)	0.00		0.00%
Recycled HHW (1)	1573		1.16%
Recycled Electronics and Batteries(1)	414		0.31%
Recycled Appliances (1)	1465		1.08%
Recycled Tires (1)	1561		1.15%
Recycled Other Restricted Wastes (1)	61		0%
Waste Recovered Subtotal	82,766		61.01%
<b>Total</b>	<b>135,668</b>		<b>100.00%</b>

(1) Volumes as reported in 2011 SCORE report.

(2) Source: MSW Waste Composition Study for the Solid Waste Management Coordinating Board, R.W. Beck 2000.

(3) SCORE does not count organics processed in residential compost bins. To date the County has distributed 3080 bins through its SWMA compost bin distribution program. An estimated 1,370 cubic yards of mixed food and yard waste is composted annually utilizing these bins.

## **F. Estimate of the annual percentage of solid waste from residential and commercial/industrial waste generators**

The solid waste stream in the SWMA consists of 56 percent residential waste, 40 percent commercial/industrial waste, and 4 percent problem materials.

## **G. Summary of solid waste collection and generation constraints and opportunities that either has impacted or may impact the existing or proposed integrated solid waste management system.**

While the SWMA spans over 91% of the County's geographic area, the County's integrated solid waste system services less than 50% of the population. Low population density is a deterrent for private waste haulers to serve the more rural areas of the SWMA so the County must provide the necessary services. While transportation costs weigh heavily in decision making processes for expansion of solid waste services, they are not the only parameter evaluated. The County is committed to providing a full range of integrated solid waste services for all of the households within the SWMA at a cost that will encourage proper disposal and recycling.

### **2.3 Construction and demolition debris.**

Demolition debris generation and disposal varies dependent upon seasonal fluctuations and construction and demolition activity. The in-SWMA tipping fee for demolition material is \$37.67 per ton and the out-of-SWMA tipping fee is \$51.67 per ton including Solid Waste Management Tax and a County surcharge.

The County no longer operates a demolition landfill. Demolition material is collected at 11 collection locations. At Northwoods, Cook and Aurora Transfer Stations, and the Regional Landfill concrete, masonry and asphalt are separated for recycling. The Northwoods, Cook, Brookston, Aurora and Hibbing Transfer Stations and the Regional Landfill also have dedicated areas for reusable material. In 2012, the SWMA disposed of 8,190 tons of demolition waste. Approximately, 5474 tons (66%) were disposed of at the Regional Landfill; 793 tons (9%) were disposed of at Waste Management Voyageur Landfill; 1923 tons (23%) were disposed of at General Waste in Itasca County.

There are three privately-owned permitted demolition and/or industrial waste landfills located in the County. During 2012, only the Waste Management Voyageurs Landfill accepted waste. Demolition and other solid waste management facilities are required to have an annual license by County Ordinance 45.

Demolition tonnage estimates for the next ten years are listed below in Table 11.

<b>Table 10</b>											
<b>St. Louis County SWMA Demolition Waste Disposal Estimates</b>											
Demolition waste generation	<b>(Tons)</b>										
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Demolition waste to Regional Landfill	5938	3065	3065	3065	3125	3125	3188	3200	3212	3225	6238
Demolition waste to private landfills within the SWMA	36506	37125	36875	37200	36938	37275	37000	37350	37063	37500	37500
Demolition waste to landfills outside the SMWA	3313	3313	3313	3313	3313	3313	3313	3313	3313	3313	3313

#### 2.4 Major solid waste generators

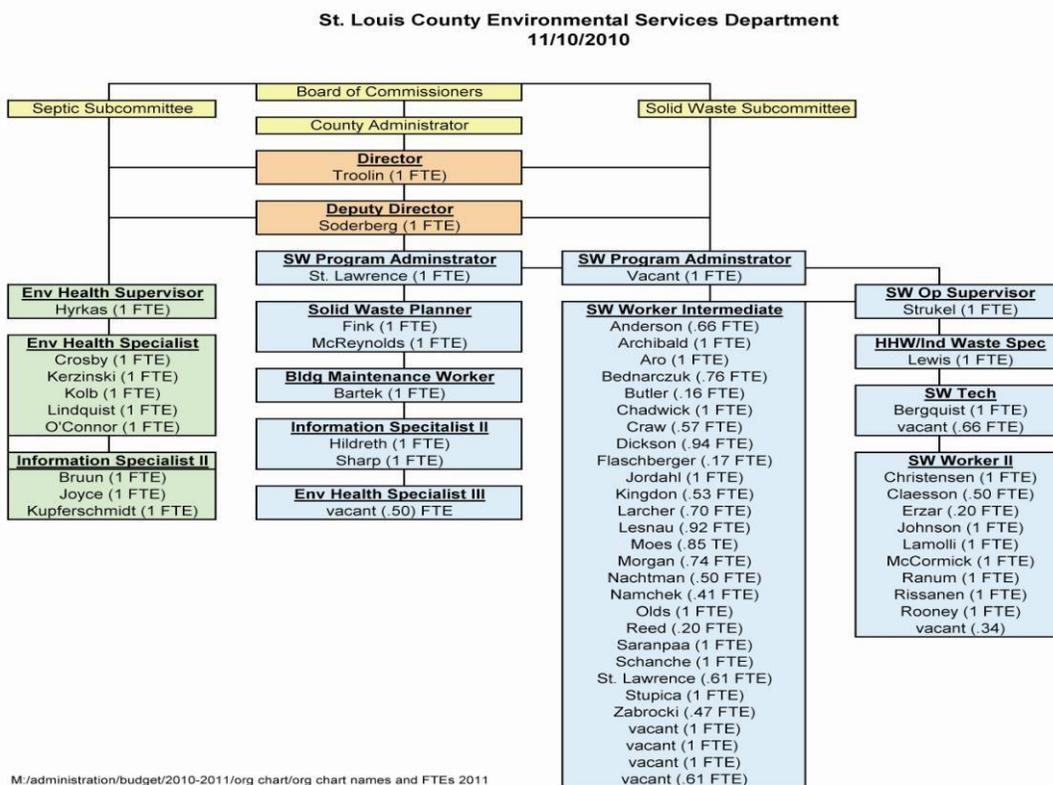
The SWMA’s largest waste generators, tonnage and types of waste they produce are presented in Table 12 below.

<b>Table 11</b>		
<b>Large Waste Generators - 2012</b>		
<b>Generator Name</b>	<b>Tons of Waste Generated Per Year</b>	<b>Types of Waste Generated</b>
Mesabi Nugget	12,891	MSW Industrial Waste/Beneficial Use/MSW
Northern Foundry, LLC	9,503	Industrial Waste/Beneficial Use
Virginia Public Utilities	1,257	Ash
Slumberland – Eveleth	1,105	MSW/Mattresses
Eichorn Furniture	121	MSW/Mattresses

## 2.5 Solid waste planning history

A detailed discussion of past solid waste planning activities is located in Chapter III of this Plan. In August, 1996, the Office of Environmental Assistance approved a County Solid Waste Management Plan for St. Louis County. This document is the third revision and update of that plan.

The County solid waste management program is administered by the Environmental Services Director. Specific program functions are overseen by the Environmental Services Deputy Director, the Environmental Program Administrator and the Solid Waste Operations Supervisor. Current staff positions include two Solid Waste Planners, two administrative support staff, one Household Hazardous Waste/Industrial Waste Specialist, 1.2 Household Hazardous Waste/Industrial Waste Technicians, one Maintenance Worker, and Regional Landfill, transfer station, and canister site personnel.



**Figure 8**

The Environmental Services Director oversees all solid waste programs, facilities and employees. The Director reports on solid waste programs to the County Administrator, the Solid Waste Subcommittee (SWSC), and the County Board. The Deputy Environmental Services Director develops program budgets, oversees the Regional Landfill and transfer station activities, and administers the solid waste service fee program. The Environmental Program Administrator is responsible for public information and recycling programs, and landfill development. The Solid Waste Operations Supervisor is responsible for the daily operation of the landfill, five transfer stations and 17 canister sites. The Planners plan for and coordinate waste reduction, reuse and recycling programs and public education, landfill usage and demolition management programs, and updating planning, ordinance and annual reporting documents. The Household Hazardous Waste/Industrial Waste Specialist is responsible for the HHW and Industrial waste planning and activities.

In the past, St. Louis County established four waste advisory groups, representing various portions of the County SWMA. The responsibility of the waste advisory groups is to communicate current activities and seek grass roots input from representatives of the residents receiving County solid waste services. After several years of regular quarterly meetings these groups and the Department made the decision to convene only at times when emerging issues or new programs provide an opportunity for local input.

In September 1994, the St. Louis County Solid Waste Subcommittee (SWSC) was established. The SWSC consists of the four commissioners that have constituents who own property within the County's Solid Waste Management Area (SWMA.) The primary function of the SWSC is to act as a clearinghouse for solid waste issues that affect the portions of the County they represent. This subcommittee provides a forum for the exclusive purpose of discussing solid waste issues. The SWSC makes formal recommendations to the St. Louis County Board of Commissioners.

Decisions requiring County Board action are typically presented to the Board by the Director after informing the County Administrator and the SWSC.

#### **A. Description of current local and regional planning activities**

St. Louis County has determined that the proposed solid waste management system described in this plan is the most feasible and prudent system available to the County at this time. The County intends to continue its local and regional solid waste management planning efforts. In 1990, all solid waste officers in the region began meeting to discuss ways to improve local programs and work together where appropriate. At regular intervals, St. Louis County will submit a new plan to address changes and improvements to the overall system, including regional planning and initiation of greater resource recovery and landfill abatement.

St. Louis County recognizes the need to evaluate and consider solid waste management alternatives, including regional solutions for landfill abatement. The County is concerned about the rising cost of solid waste management, the environmental impacts of land disposal, long-term waste abatement solutions, and achieving waste reduction and recycling goals set by the state.

Currently, the County is participating in a number of regional solid waste planning groups including the Northeast Waste Advisory Council (NEWAC), the Solid Waste Officers of the Northeast Region (SWONER). NEWAC is made up of County Commissioners and Solid Waste Officers from counties in the Northeast region. The task force is assessing the prospect of developing a regional solid waste management system and public education for the area. The most recent regional project implemented by members of NEWAC is a recycling program for mattresses and box springs. The County intends to continue to participate actively in the process.

The SWONER group consists of regional solid waste officers and staff. The group meets quarterly to discuss emerging regional and state waste issues.

### **B. Description of past impediments or barriers to the development of projects on a regional basis**

The primary impediments to developing regional projects are the lack of waste assurance, low waste volumes, the geographic distances to existing or proposed facilities in the region, and lack of assurance that state and federal assistance will continue. Existing commitments by adjacent counties also limit St. Louis County's regional options. WLSSD and neighboring counties have developed long-term arrangements for land disposal of their waste outside of the region.

### **C. Resolution of conflicting, duplicative, or overlapping local solid waste management efforts.**

The County has not experienced conflicting or overlapping management efforts. This can be attributed to the manner in which the County manages its overall system.

## **Section 3 Existing Integrated Solid Waste Management System**

### **3.1 Policies and Goals**

St. Louis County is committed to the overall goals of Minnesota state law requiring that counties develop integrated solid waste management systems, expressing a clear preference for resource recovery over land disposal. The County will consider and, where feasible and prudent, develop or make use of existing solid waste processing facilities or technologies to manage an appropriate portion of the solid waste generated in the County's Solid Waste Management Area (SWMA.) Economic considerations alone will not justify the rejection of processing alternatives. St. Louis County will utilize solid waste planning as a tool to ensure that the County considers a reasonable range of resource recovery options before selecting a proposed system.

In choosing a solid waste processing or disposal system, a county is making long-term environmental and financial decisions and commitments that can have significant economic and environmental impacts on present and future citizens. At this time the County is not considering waste-to-energy or additional resource recovery infrastructure during this planning period. The County has additional capacity at its current recycling processing facility so will

continue to provide outreach and implement collection of additional materials in its recycling streams.

### **3.2 History of the Development of the System to Present**

State law dictates that counties developing integrated solid waste management systems consider and, where feasible and prudent, develop or make use of solid waste processing capacity. St. Louis County has devoted extensive time and effort to evaluating processing capacity alternatives for its wastes. St. Louis County has previously considered programs to process mixed municipal solid waste by solid waste composting, incineration, and other mixed waste processing techniques.

Over the past 25 years the County has strategically moved from exclusive solid waste land disposal to an integrated processing system combined with the Subtitle D Regional Landfill.

In developing the St. Louis County solid waste management plan the County has:

- Reviewed the status of waste management in the SWMA, and considered the extent to which the County has developed landfill abatement alternatives;
- Reviewed and analyzed processing and disposal options available; and
- Taken steps to propose a solid waste management system for the future that abates landfilling and promotes resource recovery as much as possible.

Historic solid waste management system development activities include:

- Closure of 16 landfills within the SWMA. All of these have undergone closure and 14 were transferred to the Minnesota Pollution Control Agency in 1996 for post-closure monitoring and maintenance;
- 1988 waste-to-energy facility studies (Technical and Financial Assessment of Solid Waste Management Alternatives for St. Louis County Appendix O of the 1996 St. Louis County Solid Waste Management Plan for document);
- 1990 mixed MSW composting studies (Solid Waste Management Alternatives for St. Louis County (see Appendix P of the 1996 St. Louis County Solid Waste Management Plan));
- 1991 study - St. Louis County/Western Lake Superior Sanitary District Solid Waste Management Options (Appendix Q of the 1996 St. Louis County Solid Waste Management Plan)
- Ongoing consideration of increased usage of the WLSSD RDF facility until the closure of that facility in 1999;
- Participation in the Northeast Waste Advisory Commission (NEWAC) and other regional efforts;
- Various cooperative public/private ventures including 1992 request for proposal for operation of MSW composting facility for SWMA waste;
- Development of a "Cooperative Solid Waste Processing and Disposal Options Report" in December of 1993 (Appendix R of the 1996 St. Louis County Solid Waste Management Plan);
- Test burns of WLSSD-prepared pellets during 1994 to determine the potential for pelletizing a portion of the County waste stream and selling it to existing markets;
- Review of expansion of WLSSD waste incineration capacity during the NEWAC process; and

- Joint discussions between the County and WLSSD with Synertec during 1995 aimed at identifying potential options for cooperative action.
- Development of SWMA-wide recycling collection program;
- 1992 to present: participation in regional solid waste discussion groups, Northeast Waste Advisory Council (NEWAC) and Solid Waste Officers of the Northeast Region (SWONERS)
- 1995 Department Strategic Planning;
- 1995 - 1998 MSW processing facility analyses;
- The Northeast Minnesota Compost Market Feasibility Study;
- 1995 the Arrowhead Regional Development Commission (the staffing entity for NEWAC at that time) presented background materials for discussion with County Boards that contained analysis of six basic regional solid waste management options (see Appendix S of the 1996 St. Louis County Solid Waste Management Plan);
- 1995, the Minnesota Department of Natural Resources contracted for a report titled “The Potential to Supply MSW Compost for Mineland Reclamation in Northeastern Minnesota.” (See Appendix T of the 1996 St. Louis County Solid Waste Management Plan).
- 1995 “Report on Transitional Planning for the Solid Waste Department” (Appendix U of the 1996 St. Louis County Solid Waste Management Plan);
- 1998 Northeast Minnesota Compost Markets Study (R.W.Beck);
- 1999 Processing Evaluation Team, members included Department, WLSSD and MPCA staff;
- 1999 participation in the MSW Composition Study for the Solid Waste Management Coordinating Board (R.W. Beck, January 2000)
- 1999 Department study of low-tech source separated options including small scale localized composting projects.
- 2001 electronics recycling program;
- 2002 evaluation of source separated organics composting alternatives;
- 2002 evaluation of source separated demolition waste recovery alternatives; and
- 2002 MSW and demolition materials WTE discussions with Laurentian Energy Authority and Minnesota Power.

For a complete discussion of past planning and implementation refer to the St. Louis County Comprehensive Solid Waste Management Plan-2003

Since the 2003 update to the County’s Comprehensive Solid Waste Management Plan the County has continued its efforts to create source-separated waste streams for materials that can be processed and marketed efficiently as well as other means to reduce the environmental impact of waste transfer and landfilling. These activities include:

- 2004 to present evaluation of demolition material processing;
- 2006 regional mattress processing program;
- 2007 evaluation of efficiencies at the Regional Landfill;
- 2009 participation in State MEI “Centroid” planning;
- 2011 landfill gas recovery evaluation;
- 2012 review of MSW processing feasibility; and
- 2012 evaluation of additional plastics recycling collection.

The County believes that over the long term it will be in the County's best economic and environmental interests to participate in regional solid waste management programs to the maximum extent possible and continues to have regular strategy sessions with other counties in the region. However, the County does not believe that current circumstances are conducive to the development of a multi-county system at this time.

### **3.3 Description of existing resource recovery programs or facilities presently in use.**

The county has implemented several programs to recycle specified wastes from the MSW stream and will continue to explore existing processing options for at least some of the waste. Programs currently in use are:

- Roll-off and curbside collection of recyclables (see Appendix H) including a County-owned recycling processing facility in Virginia, MN;
- Used antifreeze recycling;
- Appliance recycling;
- Automotive batteries;
- Brush and yard waste;
- Demolition materials recycling including concrete, asphalt, shingles;
- Fluorescent tube and compact fluorescent lamp recycling;
- Household Hazardous Waste program including two permanent facilities and seasonal remote collections;
- Holiday lights and electrical cord recycling;
- Mattress and box spring recycling;
- Motor oil recovery for fuel;
- Used oil filter recycling;
- Scrap metal recycling;
- Used tire recycling and recovery as fuel; and
- Electronics recycling.

Complete discussions of these programs are included in Sections 7 through 18 of this plan.

### **3.4 Description of land disposal facilities in use**

St. Louis County has developed a state-of-the-art landfill in Virginia to meet the SWMA's land disposal needs. This landfill was developed to meet all federal and state requirements, and has been in operation since December 1993. (See Appendix X of the 1996 St. Louis County Solid Waste Management Plan - Regional Landfill). The St. Louis County Regional Landfill is the facility where the County will continue to dispose of the majority of its process residue, rejects, bypass, and MSW through 2033.

### **3.5 Costs associated with operating and maintaining the system**

The County has budgeted \$7,842,803 for solid waste management in 2013. A 10 year budget is included in Appendix B.

### **3.6 Summary of achievements and challenges. Recycling and Special Wastes**

While the entire population of the Solid Waste Management Area does not have curbside collection of recyclables, the County has strategically placed 46 locations for collection of paper,

plastic, tin, aluminum and glass. In addition, sites are available for recycling other materials including cardboard, electronics, scrap metal, and selected demolition. The County also operates two permanent household hazardous waste facilities and sites remote collections throughout the SWMA.

Transportation costs will continue to be a challenge as we strive to increase accessibility to recycling and special waste services.

### **Waste Transfer**

St. Louis County has a well-developed network of transfer stations and rural canister sites to serve the population of the Solid Waste Management Area. Rising fuel costs will continue to be a challenge as we manage this network to best serve our customers.

### **Regional Landfill**

Active fill areas are kept small as practicable so that minimal daily cover is required. Wastes are placed into a trench system to avoid wind-blown litter and spread into lifts of no more than 2-feet thick. The trench system also allows the operator the ability to work the wastes with the compactor several times before it ends up in the final place within the daily lift. With the repeated compaction and daily operations technique utilized by the contractor a consistent waste compaction density of 1800 lbs/cubic yard is achieved. This density is among the highest of any MSW landfill in the State.

Leachate recirculation within the permitted waste mass has long been an alternative leachate management option. The benefits of this management technique include some of the following:

- a larger and more expeditious landfill gas generation rate that would augment the energy recovery potential,
- increased waste settlement,
- accelerated waste degradation which will ultimately improve leachate quality.

The recirculation of leachate will be coupled with the control of the greenhouse gas emission levels either by flaring the gas or capturing the gas for energy generation. With the landfill at the half-way point of its lifespan and only a small percentage in a final closure state serious consideration of this management strategy will be considered.

Landfill gas collection projects will go hand and hand with a leachate recirculation project. With a smaller rural landfill incorporating leachate recirculation the enhanced gas production will enable us to explore some collection and utilization options for the gas where otherwise it might not be practicable. The overall goal of our landfill gas collection project will be to control greenhouse gas emissions at or below current emission levels. The challenge we face is whether we can do this by actively flaring the gas before it is released or convert the gas into usable energy, recognizing both financial and environmental cost efficiencies.

Stormwater control has become a major issue within the last couple of years. There were some design features built into the Regional Landfill facility that allowed for the settlement of potential contaminants. The retention pond within the Southeastern portion of the property collects all run-off coming off of the finished landfill slopes as well as the area and roads surrounding the permitted footprint. A permanent sampling site was established downstream of the outlet structure to sample any run-off event that might occur. Additional sampling sites were designated "downstream" of waste material handling and collection areas as well as the

leachate spray field. Stormwater control within the landfill property has worked very effectively evidenced by no run-off events coming from the three established sampling sites within the new permit timeframe.

Environmental monitoring and general safety at the landfill are crucial for an effective and sound waste management system. The environmental controls that include all of the groundwater protection elements of a subtitle D landfill are strictly adhered to in the construction and maintenance of all cells, environmental monitoring, all operations and overall management of the integrated system. The network of groundwater and surface water monitoring locations provide assurances that contaminant releases will be discovered and treated. Since the inception of the landfill in 1993 there hasn't been an incident where we have exceeded any parameter monitored in the groundwater or surface water. In addition, the landfill and the adjacent collection facility has an impeccable safety record.

## **Section 4 Proposed Integrated Solid Waste Management System**

### **4.1 Goals**

The County's goal is to reduce, to extent reasonably possible, the volume of waste landfilled within the SWMA. To this purpose the County will continue to evaluate means and methods for materials recovery that will provide the maximum benefit to the County. During this planning period the County will continue to maintain and upgrade, where necessary, its network of solid waste, special wastes and recycling facilities.

### **4.2 Objectives**

The Environmental Services Department is guided by policy established by the County Board of Commissioners. In 1994, the Board's Solid Waste Subcommittee established solid waste management goals and objectives that are still relevant today. At that time, the Board reaffirmed the County's desire to develop feasible and prudent solid waste management systems with the following statement regarding resource recovery alternatives:

*"The SW Subcommittee re-affirmed that the County is committed to developing processing capacity in order to reduce the level of landfilling of County waste. This commitment is affected by the following factors, some of which are not under the control of the County:*

- 1. Flow control issues ... In light of the lack of availability of effective flow control tools, St. Louis County will seek alternative financing options which do not require flow control prior to pursuing the development of processing capacity<sup>3</sup>.*
- 2. Cost effectiveness issues ... The County will continue to actively assess opportunities to develop processing capacity which is determined to be cost effective, but will reject options which may require considerable financial investment with uncertain results.*

---

<sup>3</sup> In 2007, the United States Supreme Court (Onieda-Herkimer decision) found flow control to be constitutional in some situations. This decision outlines certain parameters where a local unit of government may designate waste to a facility if the facility is publicly owned. The Department believes that the County would be able to provide waste assurance to a processing facility provided the institutional arrangements were properly developed.

3. *Focus on recycling ... As the development of processing capacity is explored, consideration will be given to developing capacity in a manner which enhances the achievement of County recycling goals. In addition, the County will continue to focus its resources on cost-effective recycling options.”*

While this plan does not recommend development of a specific solid waste processing option, the County continues to actively consider and where feasible and prudent develop landfill abatement and resource recovery options. This includes:

- On an ongoing basis, the Department provides background information to Subcommittee members to keep up to date on technologies and successful programs.
- The Department evaluates and reports on existing resource recovery options in other areas.
- The Department continues to evaluate and provide to the Board information on related environmental, economic, legal, and geographic factors.
- For some types of facilities (example: mass burn waste to energy), the County waste stream is likely to be too small to justify a project serving only the SWMA. The County will continue to pursue regional processing alternatives with neighboring counties and the Western Lake Superior Sanitary District.
- The Department coordinates with the Minnesota Pollution Control Agency to monitor ongoing regulatory perspective regarding resource recovery.
- The County continues to evaluate specific abatement alternatives for select portions of the County’s waste stream (source separated organic waste, demolition waste, targeted special waste streams such as e-waste) to identify potential projects worthy of further consideration.
- The Department will evaluate and monitor alternatives for the potential development of a facility to remove recyclable materials from mixed municipal solid waste (MSW), or a facility to remove recyclable materials and refuse derived fuel from MSW.
- The Department continues to aggressively evaluate the availability of potential local and regional markets for recovered resources and energy.
- The County will develop a landfill gas capture system to reduce greenhouse gas emissions from the Regional Landfill. The Department will continue to aggressively evaluate options for beneficial use of gas captured at the landfill.

Challenges that the County will continue to face in resource recovery project development will include:

- Insufficient waste for some project types.
- A lower than average median area income.
- Lack of end markets for recovered resources, particularly energy.
- Uncertain State priorities and objectives.
- Relatively low population density.
- Potential challenges posed by competing low cost (at least in the short term) options such as land disposal.

### **4.3 Landfill disposal system**

St. Louis County agrees with the waste management hierarchy established in state law (Minn. Stat. 115A.02) and concurs that land disposal of solid waste should be a last resort under any effective integrated waste management system. For that reason, the County will continue to

take steps to develop landfill abatement alternatives and will support state initiatives designed to responsibly encourage landfill abatement and resource recovery. The Goal-Volume Table (Appendix A) contained in this plan identifies resource recovery projections and anticipated total land disposal needs for the area for the next ten-year period. Between 2013 and 2022, the County expects to see a slight increase from 53.1% to 55.7% in total recycling and a slight decrease from 48.4% to 45.8% in landfilled materials.

The County also believes that there are long-term costs and potential environmental problems with land disposal of solid waste. While some of these costs are at least partially mitigated by financial assurance funding reserved for facilities, other uncertainties are likely to result in future costs and future environmental problems associated with disposal facilities faced by area taxpayers. For these reasons, the County has taken the following positions:

- Disposal capacity will be needed for service area residents for the ten-year planning period and beyond. The County believes that this capacity is most responsibly and effectively provided at the St. Louis County's Regional Landfill. Any MSW disposal capacity needs identified in the County's goal-volume table will be provided at the Regional Landfill.
- The County believes that there are additional risks and costs associated with the disposal of MSW over and above what are currently addressed by federal and state rules. Because of this, it is the County's position that MSW disposal within the County's Solid Waste Service Areas should be limited to what is necessary to meet the needs of Service Area residents. The County does not support the development of MSW disposal capacity within the Service Area for wastes generated outside the Service Area.
- Special circumstances may dictate that small quantities of MSW generated outside the SWMA will need land disposal within the SWMA. To address those circumstances and ensure that those waste generators pay an appropriate level of current and future costs the County has established a tipping fee for out-of-SWMA wastes that is substantially higher than the in-SWMA rate. In addition, the County has implemented MSW disposal surcharges authorized under Minn. Stat. 115A.919 to address current and future costs to residents of allowing disposal of MSW from outside the area.

The St. Louis County Regional Landfill has been designed and operated to effectively handle the MSW generated within the County's Solid Waste Management Area (SWMA) through 2033.

Private landfill operators are actively pursuing additional wastes for their facilities, and participation in such facilities potentially offer some types benefits as well as liabilities. For the present, the County has developed an in-county landfill and is committed to that facility to satisfy primary land disposal requirements for the SWMA. However, the County has not permanently ruled out other options and will continue to re-analyze them as need arises.

Only one landfill outside of St. Louis County is within a 100-mile radius of Virginia; the Superior, Wisconsin landfill. The Superior landfill currently accepts waste from the City of Superior and Douglas County, Wisconsin, and the Western Lake Superior Sanitary District in Minnesota. The Superior landfill may be available to accept County waste and will be contacted if an alternative to the Regional Landfill is required for waste from the SWMA. Four more landfills are within a 100 -150 mile radius - Sarona, East Central Solid Waste Commission (ECSWC), Morrison, and

Crow Wing. Other land disposal options available to St. Louis County as an alternative to the County Regional Landfill are privately owned. This includes landfills near Bruce, Wisconsin; Sarona, Wisconsin, Buffalo, Minnesota, and Elk River, Minnesota. Factors that the County will need to consider prior to making the decision to send waste to one of these facilities include:

- the County's ability to commit waste to the facilities;
- the level of state regulation and state financial assurance regulation; overall environmental and economic risks associated with each facility; and,
- the cost of using each facility.

<b>Table 12</b>				
<b>Area Landfills and Availability - 2012</b>				
<b>LANDFILL</b>	<b>OWNER</b>	<b>DISTANCE<sup>4</sup></b>	<b>CAPACITY<sup>5</sup></b>	<b>FACTORS</b>
Forest City Road Landfill, Wright County	Superior Services	200 miles	Potentially Available	In state. Long Distances. Certificate of Need issues.
Superior Landfill, Superior, Wisconsin	City of Superior	75 miles	Not Available	Out of state. Meets EPA Regional D Landfill regulations. Good transportation access.
Sarona Landfill Sarona, Wisconsin	Allied Waste	149 miles	Anticipated Available	Out of state. Moderate transportation access.
Timberline Trails Bruce, Wisconsin	Waste Management Inc (WMI)	200 miles	Anticipated Available	Out of state. Moderate transportation access
Elk River Landfill Elk River, MN	WMI	190 miles	Anticipated Available	In state. Long distance.
Crow Wing County Landfill Brainerd, MN	Crow Wing County	143 miles	Anticipated not available	In state.
Morrison Cty Landfill Little Falls, MN	Morrison County	174 miles	Anticipated not available	In state.
ECSWC Landfill Mora, Minnesota	East Central Solid Waste Commission	133 miles	Anticipated not available	In state

<sup>4</sup> One-way distance from Virginia, Minnesota.

<sup>5</sup> Rated regarding anticipated availability

For the next ten years the County will continue to utilize the capacity of the Regional Landfill as its primary management facility. The St. Louis County Regional Landfill provides all needed MSW disposal capacity in the County and the County does not support the development of additional capacity.

The County will:

- Continue to, (and, in some cases, expand) existing SWMA reduction, recycling, household hazardous waste, special wastes management, and other programs; and
- Expand commercial generator outreach activities designed to promote waste reduction, identify alternative beneficial uses for waste currently landfilled, and promote overall improved waste management.

## **Section 5 Solid Waste Reduction**

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

St. Louis County endorses Minnesota Statutes §115A.55, §115A.5501, and §115A.5502 which address and encourage source reduction through waste education programs, promotion of waste reduction, technical and financial assistance to solid waste generators, and reduction of packaging in waste. The County recognizes waste reduction as an essential component of a successful solid waste management program.

The County also endorses Minnesota Statutes §115A.93 and §115A.9301 which require volume or weight-based pricing for the collection and disposal of solid waste. The County considers the volume or weight-based pricing system an important factor in accomplishing waste reduction and landfill abatement.

The goal of the County is to make waste education and source reduction programs available to all residents, businesses, schools, and all levels of government throughout the SWMA. The County will continue to implement an aggressive program to reduce waste generated by County facilities within the County's Solid Waste Management Area (SWMA).

### **5.2 Existing Solid Waste Reduction Practices**

St. Louis County's waste reduction campaign consists of the following:

- a volume or weight-based collection and disposal pricing system and associated public education
- a comprehensive recycling program which includes roll-off recycling and curbside recycling collections
- special waste recycling programs
- a household hazardous waste collection and product exchange program
- participation in the Minnesota Materials Exchange Program
- technical assistance to the schools, cities, townships and businesses as well as other County agencies within the SWMA.

- technical assistance to other County departments and divisions on environmentally preferable purchasing and waste reduction in accordance with St. Louis County Board Resolutions 96-939, 99-768, and 06-551.
- public education materials available by mail, on-site and on the web
- residential waste reduction tips on the Department's Facebook page
- salvaging and reuse programs at solid waste sites
- annual compost bin distribution program
- participation in and use of materials developed through the MPCA's Waste Reduction (If Not You, Who?), HHW Education, and Recycling (Stop Treating Us Like Garbage) initiatives development and implementation of a burn barrel reduction campaign.

The County implemented a Recycling and Waste Reduction Grant program for Cities and Townships within the SWMA during 2008. Twelve local units of government received \$87,793 to assist in recycling and other solid waste project costs totaling \$165,980.

The County initiated a Recycling and Waste Reduction Grant program for schools within the SWMA during the 2010-2011 school year. Five the eight eligible school districts applied and received a total of \$25,336 in grant funding to develop sustainable recycling programs within their schools. Grant funding covered purchase of collection bins, janitorial carts, curriculum and promotional supplies. Department staff will continue to work along with the schools to facilitate these programs.

### **5.3 Specific Programs To Be Developed**

The County will increase its waste reduction efforts on the business and industrial sectors with emphasis on source reduction, buy recycled, procurement, waste reduction and recycling, and hazardous waste management. Solid Waste staff will provide technical assistance and on-site visits when requested. When staff time does not permit on-site visits these customers will be referred to MnTAP and Minnesota Waste Wise.

The County will also inform businesses about and encourage businesses to participate in the Minnesota Materials Exchange program which connects generators and potential users of unwanted materials.

The Department's public education programs will continue to address such topics as source reduction, reuse, recycling, and proper disposal of household hazardous waste. The staff will utilize the following media resources to achieve maximum program awareness:

- paid advertising
- news releases
- newsletters and flyers
- radio announcements
- public access television
- staffed booths and displays
- the County's web site
- YouTube
- Facebook and other social media

Required staff time for implementing the program will amount to approximately .30 FTE for a

Solid Waste Planner and .10 FTE clerical.

#### **5.4 Program Budget**

In 2013, the Department budgeted \$54,015 for waste education to the public of which the above mentioned programs are included. The programs are funded by the solid waste service fee and SCORE revenues.

## **Section 6 Waste Education**

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

St. Louis County considers public education the most important component in its strategy to achieve waste abatement goals and is planning accordingly. Over the next ten years, ongoing public education will be provided for all elements of the solid waste management program that can benefit from an informed public. The County's goal is to provide public education to all SWMA residents.

### **6.2 Existing Solid Waste Education Practices**

The St. Louis County Environmental Services Department is the primary source for waste education in the SWMA. Additional educational services are provided through the County Extension Service, private recyclers, MPCA Education Grant recipients, local units of government and the WLSSD.

Waste education programs within the SWMA are the primary responsibility of one of the Solid Waste Planners. The Department also considers education of field staff a high priority. To this end the Solid Waste Information Guide was developed and is available at all Department field sites. Current waste education programs within the SWMA include:

- Talks to community organizations and local government meetings
- Radio and television advertising promoting County programs for HHW, special wastes and recycling
- Providing information brochures to the public on recycling, composting, home-use medical waste and HHW disposal
- Displays and presentations at various environmental and county fairs
- Topical radio talk shows
- Recycling, waste reduction, and general waste management presentations at schools and community groups meetings
- Waste education announcements and video on public access television
- Toll-free waste information hotline
- Billboard advertising
- The Department's web page provides locations and other information on recycling, special waste disposal, composting and HHW collections
- The Department's Facebook and YouTube sites
- Up to date information on Earth's 911

- Tours of the Regional Landfill, transfer stations and canister sites for youth groups and college classes
- Event recycling bins and recycling trailer with educational signage
- Providing technical assistance and copy-ready information to local units of government concerning recycling and waste reduction
- Working with the NEWAC education committee to further regional solid waste management messages
- Active participation on MPCA education committees for recycling and HHW programs
- Active participation in the ReUse MN steering committee
- Liaison with area school 'Green Teams' and school leadership

The County Extension Service provides the Info-U phone system which extends the resources of the University of Minnesota to residents of St. Louis County, 24 hours a day and seven days a week. This system provides research based information to address current issues and concerns. The County Extension Service is also active in other waste education work including waste reduction, recycling, and backyard composting.

Some private recyclers have used newspaper advertising and flyers to educate the public within the SWMA on the benefits of recycling.

The Department also strives to keep the cities and townships informed on issues in the solid waste field. Minutes of the Solid Waste Subcommittee meetings, updates from the Department Director and copies of advertisements for recycling, waste education and other activities are sent to the clerks on a regular basis. The Department likes to keep the advisory groups, cities and townships abreast with current issues in solid waste management and processing through presentations at committee and council meetings.

### **6.3 Specific Programs To Be Developed**

St. Louis County intends to continue existing waste education programs with emphasis on recycling, source reduction and business waste management alternatives utilizing staff presentations, pamphlets, and displays and mailings.

The Department will be developing a waste abatement education program for area businesses in 2014 emphasizing recycling, waste reduction and environmentally preferable purchasing. Staff will facilitate networking with resources such as MnTAP and ReTAP.

Implementation of the Department's public education program will primarily be the responsibility of one of the County's two Solid Waste Planners. Approximately .1 FTE will be dedicated to public education efforts with .01 FTE by the Program Administrator.

### **6.4 Program Budget**

In 2013, St. Louis County has budgeted \$54,015 for the public education program. Similar amounts are anticipated in future years. As the County moves forward in implementing additional recycling collection and waste reduction programs this amount is expected to increase significantly. Funding for the program is derived from the solid waste service fee and SCORE revenues.

## 6.5 Schedule of Implementation (new programs)

Table 13									
Schedule of Implementation of New Programs									
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Additional Recycled Materials <i>(Other #1 and #2, cartons, plastic store bags)</i>									
Business waste reduction programs									

## Section 7 Recycling

### 7.1 General Policy and Goals

St. Louis County has established recycling policies and goals that meet or exceed recycling goal requirements in Minnesota Statute §115A.551, Subd. 2, the opportunity to recycle requirements in Minnesota Statute §115A.552, and the organized collection requirements in Minnesota Statute §115A.94. Based on the 2012 Goal Volume Table (see Appendix A), the County has established recycling goals of 56 percent by weight of the Solid Waste Management Area's (SWMA)'s solid waste by the year 2022. Based on the preliminary 2012 SCORE Report, St. Louis County's recycling rate was 64.2 percent. It is the County's goal to continue to recycle a minimum of 52% by weight during the course of this planning period.

It should be noted that the recyclables market within St. Louis County is limited. There is significant room to grow businesses using recycled materials from the County's SWMA and surrounding programs. The majority of recyclable materials are hauled 200 miles or more to markets in or near the Minneapolis/St. Paul metropolitan area or in Iowa, including MDK, MasterMark and RockTenn. Mixed paper is sold to USG in Cloquet.

### 7.2 Existing Recycling Practices

The County intends to continue the recycling program it began in 1989 by continuing the existing curbside collection programs, expanding and enhancing the drop-off collection program, encouraging and supporting SWMA-wide recycling participation by residents, government entities, businesses, and industries, and maintaining the County-owned recycled materials processing facility.

Traditionally the County has worked with private sector service providers to conduct the roll-off collection and recyclables processing and marketing portions of the overall recycling program. Since 1998, the County has contracted with Northern Minnesota Recycling Incorporated (NMR). To operate the County's recycled materials processing facility near the Regional Landfill in Virginia. The facility was built in 2000, utilizing an OEA matching grant of \$1.16 million and has the capacity to process up to 12,000 tons of recyclables per year.

<b>Table 14</b>						
<b>Recycling Tonnages</b>						
<b>Recycling Processing</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Tons Processed</b>	5,783	5,548	5,515	5,583	5,008	5,392

*Excluding glass utilization program*

In 1998, St. Louis County established a Recycling and Waste Reduction Grant to help cities and townships develop new or improved recycling or waste reduction programs. The grant program made \$150,000 available in 1998 and \$167,900 in 2010 to assist local units of government (including the Bois Forte Reservation) in the County's solid waste service fee area establish, maintain, or further develop their solid waste recycling and waste reduction programs. Eligible program costs included, but were not limited to, recycling equipment and containers, recycling-related staff costs, yard waste composting activities, recycling/reduction advertising costs, waste education, recycling end-market development, and household hazardous waste collection activities. The program was offered on a one year only basis for each grant round. Through the grant program, a total of \$105,929.24 was awarded by the County to 13 cities, 12 townships, and the Bois Forte Reservation in 1998, and \$87,794 in 2008 benefiting recycling programs in 18 communities.

Also in 1998, the County started collecting and stockpiling glass for use in local projects. This keeps about 1,200 tons per year of relatively low value material out of our primary processing system resulting in a cleaner recyclables stream. Since 1998 approximately 630 tons per year of glass is processed as an aggregate supplement and used as erosion control, trench bedding for leachate spray field supply pipes, road base and pad material on or around the Regional Landfill.

In 2011 the Department contracted to have textile recycling bins placed at selected solid waste sites. The County is currently contracting with USAgain for textile collection at 10 solid waste facilities throughout the SWMA.

Effectiveness of all programs that support recycling and waste reduction are evaluated on an on-going basis.

Current St. Louis County recycling program goals are to:

- Work with the Minnesota Pollution Control Agency, local economic development agencies, local cities, and private developers in an effort to expand local end markets for recycled materials
- Recycle the maximum amount of solid waste technically and financially feasible
- Continue to exceed State SCORE recycling goals by 5 percent
- Implement a program that is user friendly and encourages recycling by the public
- Remove and properly dispose of problem materials from the solid waste stream
- Inform and educate the public regarding proper and effective solid waste management procedures

- Provide technical assistance to public and private entities to ensure proper solid waste management
- Develop/maintain strong relationships with end markets

To ensure all SWMA residents have an opportunity to recycle, St. Louis County has developed a comprehensive program which includes:

- Curbside recycling collection in four cities
- Cardboard balers at Northwoods and Cook Transfer Stations
- Recycling drop-off containers located at 46 sites throughout the SWMA Financial assistance and/or equipment to one private entity
- Lease of recycling trailer to Bear Head Lake State Park
- Lease of recycling trailer to Gilbert school
- Providing recycling information to the public through newspaper articles, brochures, radio ads, web site, Facebook, YouTube and personal contact

St. Louis County has established a curbside recycling program with the cities of Eveleth, Mt. Iron, and Virginia. The City of Hibbing discontinued public curbside pick-up, but has contracted with a waste hauler to provide it on a subscription basis. The County pays the processing costs (up to a predetermined limit set by the County) for any city which contracts with the County to bring its curbside collected recyclables to the County recycled materials processing facility.

To be eligible to participate in the County curbside recycling program, the following must be met:

- Each city is to have a weight-based or volume-based system for both residential and commercial garbage customers
- Each city is required to have a minimum of one curbside recycling collection per resident/business per month
- At least once per month, each city will accept in its curbside program commingled fiber items including newspaper, magazines, catalogs up to -inch thick, junk mail (including "window" envelopes), office paper, file folders, and boxboard (cereal boxes, beverage cases, etc.)
- At least once per month, each city will accept in its curbside program commingled core recyclables: aluminum and bi-metal cans, tin-coated steel cans, and "necked" high-density polyethylene (HDPE) and "necked" polyethylene terephthalate (PET) plastic containers.
- Glass collected by the cities will be stockpiled, crushed, screened, and used by the Environmental Services Department as an aggregate substitute on various department projects
- At least once per month, each city will accept in its curbside program glass containers (clear, brown, and green)
- All loaded recycling trailers shall be weighed on the weigh scale at the Regional Landfill or at a County transfer station prior to being delivered to the County recycled materials processing facility
- The County will take ownership of the delivered materials and will retain any revenue derived from their sale

- Processing cost for tonnage exceeding the predetermined limit will be the responsibility of the city

In 2010, the City of Hibbing opted out of the curbside program and established a fully-staffed drop-off site. They continue to provide curbside collections to some businesses. The St. Louis County recycling drop-off program consists of 46 collection sites including the Hibbing site. These sites provide residents throughout the SWMA an opportunity to participate in the County's recycling program.

St. Louis County has a contract with a private recycling processor to operate the program. Under the terms of the drop-off contract, empty 25 cubic yard drop-off containers (owned by the County) are delivered to the collection sites by the processor and full containers are hauled to the County recycled materials processing facility. The recyclables are weighed at the Regional Landfill scale, tipped at the Recycling Processing Facility processed on the sort line, baled, and prepared for market.

Recyclables allowed to be commingled in the "fiber" compartment of the drop-off container include: newspapers, magazines, catalogs and telephone books (up to ½" inch thick), office paper, file folders, junk mail (including "window" envelopes), and box board.

"Core" recyclables allowed to be commingled in the same compartment include: aluminum and bi-metal cans, tin and steel food cans, and "necked" containers made of #1 and #2 plastic. Green, brown, and clear glass are allowed to be commingled in the glass compartments.

At collection sites with very high volume, multi-compartment containers have been replaced with two single-compartment containers. One container is for the "core" recyclables (plastic, tin, aluminum, and glass), and the other container is for recyclable fiber items.

Beginning in 1998, the County also provided a separate 20 cubic yard container at ten large volume roll-off sites exclusively for the collection of glass. These containers along with glass collected in the five-compartment containers are delivered directly to the glass stockpile at the Regional Landfill, completely bypassing the processing facility.

Beginning in 2011 the Department began placing bins designed for old corrugated cardboard (OCC) collection at specific locations. There are currently OCC bins at nine locations. Sites continue to be evaluated for appropriate additional placement of these bins.

The County continues to evaluate the drop-off program on an ongoing basis. Though changes may occur to improve the program, the County intends on maintaining its drop-off program.

St. Louis County provides partial financial reimbursement to the Floodwood Services & Training, Inc. (FST) for the operation of their recycling collection program. Containers are placed outside the recycling building for the collection of plastic, tin, aluminum, glass and paper products. In addition, the County provided FST containers for 'Away From Home' recycling collection at gas stations and convenience stores in Floodwood.

The Department has developed an agreement with Lake County in order to provide recycling services at the Lake County Fall Lake solid waste facility. The Department provides haulage and processing and bills Lake County for this service.

The Department continues to provide information to the public regarding its various recycling programs. The Department's toll-free number is staffed during business hours and provides an automated menu of information options after hours. The Department's page on the County's web site provides up-to-date recycling locations and links to local recycling drop-off locations by zip-code through Earth's 911. Newspaper articles and ads, brochures, flyers, Facebook and personal contact by Department staff are used to educate the public and promote the programs. In addition, the Department staff welcomes questions and comments from the public and is always available to address their needs.

The Department has also published instruction brochures informing the public of acceptable items in the County's drop-off and curbside recycling programs and maintains public access to educational information at solid waste sites, on Facebook and the County's web site, [www.stlouiscountymn.gov/recycle](http://www.stlouiscountymn.gov/recycle).

St. Louis County complies with Minnesota State Statute §115A.151 which requires that all county and local units of government recycle at least three of the following four materials: paper, glass, plastic, and metal; and that the collected recyclable materials be transferred to a recyclables material processing facility.

### **7.3 Programs To Be Implemented**

Emphasis will continue to be placed on fostering sustainable recycling in the schools. Department staff are currently working with five school district 'Green Teams' providing links to services and available information such as the MPCA's 2010 school waste composition study and the 'What a Waste' curriculum. The Department will continue to work with the cities to facilitate collection of recyclable materials from schools into the curbside programs. Rural schools are encouraged to use the County's drop-off locations when school staff or student organizations are available to do so or to contract with local haulers. These efforts will be continued over the next decade. The County will assist other area school districts in the development and implementation of school recycling programs upon request. Assistance will also be provided for rural schools to transport students to the County's recycling processing facility for tours.

The Department also strives to promote recycling, "buy recycled" and Pollution Prevention programs within the St. Louis County departments. Currently, at least three materials are recycled at each County facility, with each facility having its own unique recycling program. Department staff will work with other County departments to facilitate maximum use of existing programs.

Additional materials will be added to the County's recycling stream in 2013 including film plastics, remaining #1 and #2 plastics, and cartons. The County will also be reviewing incentives for haulers to offer curbside recycling collection. Mandatory recycling will be reviewed during this planning cycle as well as single-sort collection and the technology needed for upgrades to the County's recycling processing facility.

### **7.4 Responsible Person**

Implementation of the Department's Recycling programs is the responsibility of the Program

Administrator and one Solid Waste Planner. Approximately .2 FTE Administration and .2 FTE Planner time is allocated to administer recycling programs. In addition the recycling processing contractor staff includes a full-time manager and 7 to 10 FTE staff.

### 7.5 Program Budget

In 2013, St. Louis County has budgeted \$1,225,885 for curbside and roll-off recycling programs and materials processing. A detailed projected Department budget is included as Appendix B.

### 7.6 Schedule of Implementation

Table 15									
Proposed Recycling Implementation Schedule									
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Add plastics and cartons	Assess incentives for haulers to collect recyclables	Review technology for sorting upgrades Assess single sort		Assess mandatory recycling options			Review technology for sorting upgrades		

## Section 8 Yard Waste Management

### 8.1 General Policy and Goals

St. Louis County endorses and supports Minnesota Statute §115A.931 which prohibits a person from placing yard waste in mixed municipal solid waste; a disposal facility; or in a resource recovery facility except for the purposes of reuse, composting, or co-composting after January 1, 1992. The County’s goals are to educate the public on the yard waste statute and enforce any violation of the statute.

The County participated in the 1999 MSW Composition Study for the Solid Waste Management Coordinating Board as a host site. Results of that study showed that yard waste (grass, leaves and woody material) was less than one percent by weight of the waste in the MSW stream.

### 8.2 Existing Programs

The majority of the yard waste (leaves, grass clippings, and tree and plant residue) in St. Louis County’s solid waste stream is generated in the urban centers. Little to no yard waste enters the waste stream from the rural areas of the SWMA. The St. Louis County yard

waste program targets the establishment and promotion of yard waste sites convenient to the urban centers. St. Louis County currently provides yard waste sites at four transfer stations, three canister sites, and the Regional Landfill. Several townships as well as the cities of Babbitt, Chisholm, Ely, Eveleth, and Hibbing also provide yard waste sites for local residential drop-off where materials are allowed to compost on-site. Urban residents are encouraged to use backyard compost bins.

Yard waste is not weighed at the County yard waste compost sites, but is estimated at approximately 8% of the northern St. Louis County MSW waste stream. This calculates to approximately 4,100 tons per year.

Yard waste compost sites were established by St. Louis County in 1992, coincidental to the State's ban on landfilling yard waste that went into effect on January 1, 1992. Although County yard waste compost sites are available, St. Louis County encourages residents to practice on-site reuse. This includes using grass clippings for mulch and yard waste for backyard composting.

The Department instituted a back yard compost bin program in 2006. Through the 2013 season, 3,400 Garden Gourmet compost bins have been distributed to residents and seasonal property owners in the SWMA. The program is partially funded through Solid Waste Services fees. Residents pay a reduced price for bins to complete the funding of the program.

Most yard waste that enters the waste stream is generated in the cities. As a result, many cities have developed programs to address this situation.

These programs can be categorized as:

- a) City-provided one time per year collection available in the cities of Gilbert, and Tower-Soudan, Breitung Township.
- b) City-provided two times per year collections available in the cities Chisholm, Eveleth, Fayal Township and the City of Hibbing.
- c) City-provided twice per month collection available in the City of Babbitt.
- d) Permit-By-Rule yard waste collection sites available in Biwabik, Biwabik Township, Buhl, Ely, Floodwood, Hibbing, McKinley, Meadowlands, Mt. Iron Winton.

Yard waste collected in these city programs is composted on-site or transported to a County yard waste compost site.

In addition, residents throughout the SWMA are allowed to deliver yard waste to the County yard waste compost sites at no charge during the sites' hours of operation. The yard waste is placed in a static pile and turned periodically with a loader to aerate the pile and ensure continued composting action. The County does not measure moisture content or check for elevated temperatures indicating the composting process is occurring. Since the County's yard waste compost sites are located at County facilities, no odor or other environmental problems have been experienced.

The Department utilizes specific public education targeting yard waste composting in the SWMA. Also, the County Extension Service provides information to homeowners on backyard composting through its education efforts.

The following County locations provide yard waste compost sites:

- Regional Landfill
- Brookston Transfer Station
- Cook Transfer Station
- Hudson Transfer Station Northwoods Transfer Station
- County Highway #77 Canister Site
- Comstock Lake Canister Site
- Soudan Canister Site

As a pilot project, the Department ground the brush pile at the Regional Landfill, Cook and Northwoods Transfer Stations and the County 77 Cansiter site during the Summer of 2002. Approximately 700 cubic yards of brush were ground. Regular grinding of brush at larger sites is now on-going. The material is being used on site for erosion control or given away to residents. When there is no local demand for ground brush it is sold as biomass to Minnesota Power Company.

Beginning in 2003, the Department has eliminated the tipping fee on brush generated within the Department Service area in order to encourage proper management of the material.

The County's public education program identifies the ban on the landfilling of yard waste, the locations and hours of the public yard waste composting sites, and the methods of back yard composting. The yard waste education campaign is the responsibility of one of the County's two Solid Waste Planners. Budgets for the yard waste sites are included in transfer station, canister site, roll-off container site, and landfill budgets. Required staff time is anticipated to be .05 FTE.

### **8.3 Specific Programs to Be Developed**

St. Louis County will continue the present yard waste program providing finished compost from Department sites to the public at no charge and offering back yard compost bins to the public each spring.

### **8.4 Program Budget**

St. Louis County has budgeted \$5,000 for its yard waste program in 2013 and will continue to budget similar amounts into the future. An additional \$17,000 is budgeted for the back yard compost bin distribution program. Funding for these items is obtained from the solid waste service fee.

### **8.5 Schedule of Implementation**

No changes to the yard waste management program are scheduled during the next 10 years.

## **8.6 Environmental Impacts of Yard Waste Management**

There are no adverse effects to the environment from the current yard waste management program.

## **Section 9 Source-Separated Organic Materials Composting**

The County has reviewed Source-Separated Organic Materials Composting options in the past and has no plans to implement programs within the 10 year period of this plan.

## **Section 10 Mixed Municipal Solid Waste Composting**

The County has reviewed MSW Composting options in the past and has no plans to implement programs within the 10 year period of this plan.

## **Section 11 Solid Waste Incineration and Energy Recovery**

The County understands that solid waste to energy and related resource recovery options are supported and promoted by state law as part of an integrated solid waste management system, and the County will continue to review and evaluate these options on an ongoing basis. Reviews to date have included Service Area-specific reviews and joint reviews with neighboring counties and the Western Lake Superior Sanitary District (WLSSD).

During the future period addressed by this plan, the County intends to continue to evaluate technical options and work to achieve partnerships with neighboring counties, local businesses, and the State to promote the development of an additional waste processing capacity. This evaluation will include project-specific feasibility studies and consideration of emerging conversion technologies. Specific proposed actions include:

- The County will work with the appropriate State of Minnesota agencies to support policies and programs enabling expanded resource recovery;
- The Department will conduct ongoing internal analyses of potential energy markets, and other markets for recovered resources;
- The Department will expand outreach efforts to local utilities and other businesses that may serve as energy markets;
- The Department will work with neighbors to evaluate regional processing efforts;
- The Department will expand its knowledge of existing processing options through tours of facilities, participation in conferences, workshops, and associations; and
- The Department will continue educational efforts to inform citizens of the benefits of resource recovery.

## **Section 12 Land Disposal of Mixed Municipal Solid Waste**

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

It is the policy of St. Louis County to provide safe and accessible disposal services at the lowest possible cost to its citizens and to dispose of waste materials in a manner that ensures the protection of the environment. Currently, the County owns and operates one municipal solid waste landfill.

It is the policy of St. Louis County to provide, through its waste transfer system, conveniently located disposal sites for rural residents that choose to self-haul their solid waste.

Although the total elimination of land disposal of solid waste is not possible, it is the goal of St. Louis County to continually evaluate cost-effective alternatives to land disposal for implementation within the SWMA. Land disposal alternatives include reduction/reuse of waste materials, recycling, composting, material recovery, and incineration.

### **12.2 Existing Program**

The St. Louis County Regional Landfill (MPCA Permit No. SW-405) is located approximately 2.5 miles east of the City of Virginia, Minnesota. The landfill was constructed in 1993 to meet or exceed all regulatory requirements. During construction, five feet of mine dump material was excavated, put back in place and compacted to maximum density. Two feet of low permeability material was placed and compacted above this base material. A 60-mil high-density polyethylene liner was placed over the low permeability clay layer and a one foot drainage layer of granular material was placed over the liner. A leachate collection system was installed within the drainage layer.

The leachate system collects liquids from the bottom of the landfill via a system of pipes and pumps it into two holding ponds where the leachate is aerated to promote biological processes which remove volatile organic compounds. These ponds also encourage the settlement of particulates from the leachate. After aeration processing and testing, the leachate is sprayed onto an adjacent 22-acre field for further biological processing. The design capacity of 12,000,000 gallons for leachate storage has proven to be more than adequate. In 1999, to provide temporary additional treatment capability the County installed additional sprayers. These spray heads were relocated in 2009 as the spray irrigation field was upgraded. As a contingency, the County is authorized to transport leachate to the WLSSD wastewater treatment facility in the future in the unlikely event that leachate generation rates increase beyond the system's capacity.

<b>Table 16</b>	
<b>St. Louis County Regional Landfill Permitting Activity</b>	
<b>Action</b>	<b>Date</b>
1992 County Solid Waste Plan Approved and Certificate of Need Issued	December, 1992
Original Landfill Permit Issued	April 30, 1993
Phase 1 construction	May - November 1993
Phase 1a construction	May - August 1995
Landfill 5-year repermit application submitted to MPCA	July 1996
1996 County Solid Waste Plan and Certificate of Need	August 29, 1996
Landfill EAW completed and approved	1997 - 1998
Landfill Permit Expired	April 30, 1998
County Plan update submitted to OEA	March 1999
Landfill 5-year repermit and modification application submitted to MPCA	February, 2003
Landfill EAW Submittal	March, 2003
2003 County Solid Waste Plan and Certificate of Need Submittal	April, 2003
Repermit	12/9/2008
Development of Nitrogen Management Plan	March, 2009
Upgrades to Leachate Land Application System	9/2009 – 4/2010
Leachate de-nitrification demonstration project	Summers 2010-2012

The landfill began accepting waste on November 18, 1993. Over the past nineteen years, approximately 1,472,000 cubic yards of MSW have been placed in the landfill. Approximately 213,690 cubic yards of cover, industrial waste and asbestos have also been placed in the landfill. MPCA Permit SW-405 authorized 2,321,820 cubic yards of permitted capacity for the Regional Landfill. St. Louis County submitted a permit application in February, 2003, to expand the landfill footprint, update landfill information, and request additional landfill capacity. The current permit was issued in December, 2008 and expires on December 9, 2013. Final cover has been placed on cell 1A of the landfill at this time which is approximately 3.8 acres.

On June 9, 1999, St. Louis County was granted a Certificate of Need (CON) in the amount of 429,625 cubic yards valid through January 1, 2004. St. Louis County has used 196,184 cubic yards of CON through December 31, 2002, leaving a balance of 233,441 cubic yards. In 2003 the County received a new CON declaration of 774,560 cubic yards. Through 2012, 1,506,795.69 cubic yards of MSW has been placed in the landfill. The CON balance at the end of 2012 was 151,638 cubic yards. In this plan the County requests a new CON of 606,262 cubic yards for a new total of 757,900 cubic yards as based on the Goal Volume Table (Appendix A) which covers the period 2013 through 2022.

The quantity and waste type of each load delivered to the landfill is recorded on a computerized landfill management system (LMS). The vertical and horizontal coordinates of the daily working face are also recorded on the LMS. As a result, the location of all waste placed in the landfill can be identified by the date it was landfilled.

**Table 17**

**St. Louis County Regional Landfill tonnages: 1993 – 2012**

	1993 through 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MSW	466,541	54,560	53,066	55,509	54,006	56,321	50,312	49,784	51,346	52,007
Ash	62,765	9,952	9,789	10,345	13,266	4,687	0	0	0	1,217
Industrial Waste*	108,535	7,819	8,622	9,362	3,759	6,222	2,191	10,928	16,364	12,675
Demolition	0	0	0	0	0	0	2,344	5,289	2,522	2,782
<b>Total</b>	<b>637,841</b>	<b>72,331</b>	<b>71,477</b>	<b>75,216</b>	<b>70,991</b>	<b>67,230</b>	<b>54,847</b>	<b>66,001</b>	<b>72,153</b>	<b>68,681</b>

\*includes Beneficial Use waste

Incoming waste is screened by the scale attendant for acceptability. In addition, the landfill operator monitors incoming waste as it is placed in the active tipping area of the landfill and unacceptable waste deposited there is removed from the landfill and properly disposed. St. Louis County has implemented a random load inspection program which began in 2003 to further ensure that unacceptable wastes are excluded from the landfill. Industrial wastes accepted at the landfill include empty pesticide containers (if triple-rinsed), asbestos, foundry wastes, incinerator ash, dry paint residue, sandblasting waste, solidified ink sludge, foundry sand, grey filter cake and treated petroleum contaminated soils which are used as cover material.

**Beneficial Use**

In 1996, a large generator of spent casting sand, Northern Castings, notified St. Louis County that it was considering several disposal options for its waste material. One of the options being investigated was the use of its waste material as alternative daily cover at the County's Regional Landfill. Northern Castings in Hibbing hoped that, in this manner, their waste materials would be used for some beneficial purpose and, as a result, their disposal fees would be reduced. The St. Louis County Department contacted the Minnesota Pollution

Control Agency and requested approval to use spent casting sand as an alternative daily cover material. This approval was granted and the Department established a new waste code category called Beneficial Reuse Material for this material to acknowledge its usefulness at the landfill. To date, over 71,903 tons of this material has been diverted for use as cover material at the landfill.

The County MSW management network includes 18 canister sites, five transfer stations, and a landfill to service its customers. The County charges the same tipping fee for all service area residents, regardless of their location.

In order to make this system function, it is necessary to transport waste from the canister sites and transfer stations to the final disposal facility. Waste from the canisters at the respective canister sites is transported by private haulers under contract with the County to the appropriate transfer station or directly to the Regional Landfill.

### **Transfer Stations**

St. Louis County also owns and operates five solid waste transfer stations. The Northwoods (Ely), Hudson (Aurora), Cook, and Brookston transfer stations were built in 1990, and the Hibbing Transfer Station in 2002. These facilities consist of a concrete enclosed tipping floor where waste is transferred from commercial haulers and private individuals to transfer trailers. In 2011 and 2012 the Northwoods and Cook transfer stations began using a grapple to further compact waste in the transfer trailers and increase hauling efficiencies. Solid waste from the Northwoods, Hudson, Cook, Brookston and Hibbing transfer stations is transported to the Regional Landfill for final disposal.

Incoming waste is screened by the site operator and unacceptable materials are refused or diverted for proper disposal. All of the transfer stations include a certified weigh scale and computerized charge-by-weight systems to record the type and amount of incoming waste materials and assess the correct disposal fees. In addition, all transfer stations also accept appliances, scrap metal, recyclable materials, electronics, mattresses and box springs, used waste oil and filters, antifreeze, fluorescent tubes, vehicle batteries, demolition material, tires, used antifreeze, and yard waste separately from the municipal waste.

The haulage of waste from all transfer stations is done by private haulers under contract with the County. The County owns the transfer trailers and roll-off units. The contractor provides the employees and vehicles to transport the waste.

### **Canister Sites**

To service residents in more remote areas, the County owns and operates seventeen canister sites and has an agreement with Balkan Township who owns and operates a canister site which transfers MSW to the Regional Landfill. At these sites, individuals dispose of their waste in enclosed canisters for transport to the transfer stations or directly to the Regional Landfill. Site attendants monitor incoming waste for acceptance. Many of these sites also accept recyclable materials, appliances, fluorescent tubes, waste oil, demolition material, scrap metal, tires, and yard waste. Users of these sites pay disposal fees based upon the volume of their waste. See Appendix C for a full listing of County facilities and services available.

Two other canister sites owned and operated by the Bois Forte Tribal Council closed in 2011 when they instituted curbside collection of garbage and recycling for their residents.

To ensure employee and customer safety, St. Louis County emphasizes the safe operation of its facilities through its Safety Plan, its Contingency Action Plan, and its Emergency Response Plan. The Department developed a Safety Committee in 2002 which meets as issues arise. If safety issues are reported the Committee meets as soon as possible to resolve the issue before an injury might occur. Over the past ten years, no serious incidents have occurred at any of the County's sites as a result of improper operations or unsafe conditions.

### **Bulky Materials**

Mattresses and box springs are a costly and difficult problem material that must be handled at our canister sites, transfer stations, and the Regional Landfill. In an attempt to determine the scope of the problem, the Department conducted a mattress/box spring count during the month of February, 2003 and found that approximately 530 units were delivered to our facilities during that time. All of these units ultimately were disposed of in the Regional Landfill.

The Department is actively participating in the Regional Mattress Recycling Program that was implemented in June 2004.. Through 2012 the County has recycled 20,455 mattresses and box springs or approximately 685 tons at an average rate of 2,900 units per year. This action has saved the County valuable landfill space and unwanted maintenance costs with landfill compaction equipment.

### **Unacceptable Materials**

Hazardous and liquid wastes are not accepted at the landfill. Special wastes such as yard waste, scrap metal, waste oil, oil filters, automobile batteries, fluorescent tubes, appliances, used antifreeze, cathode ray tubes, and tires are handled as separate waste streams and are not landfilled.

### **Municipal Utilities Coal Ash**

The Regional Landfill (RLF) accepted approximately 5,500 tons of municipal utility coal ash annually from the City of Virginia from 1993 to 2007. Another 5,000 tons per year of municipal utility coal ash generated by the City of Hibbing was being landfilled at the Regional Landfill between 2001 and 2007. Since that time both municipal utilities have contracted with Waste Management – Canyon Industrial Waste Landfill and only a portion of the Virginia ash was brought to the Regional Landfill.

MPCA staff have raised concerns about potential boron loading problems associated with the disposal of the additional coal ash at the facility. As a result, the Department has initiated a new monitoring/testing program to identify potential coal ash related problems. To date, no problems have been detected in the leachate spray field due to coal ash acceptance. A January 28, 2003 report titled "Evaluation of the Effects of Coal Ash in the St. Louis County Regional Landfill" was included in the 2003 issue of this plan.

The County plans to continually evaluate the monitoring and testing results and to review any future research on boron loading which may apply to the spray irrigations fields. At this time municipal utilities coal ash will continue to be accepted as needed at the RLF, however, the County will exercise its option to refuse this waste stream in the future based on results of future information.

As no industrial or hazardous wastes are accepted at the County's solid waste transfer facilities, environmental and health impacts of the County's waste transfer program are the same as for any truck haulage operation. This includes air quality concerns from truck exhaust systems and the possibility of vehicle accidents. The screening of waste entering County facilities minimizes the possibility of release of toxic or hazardous materials from the waste.

### **Ground Water Monitoring**

Up-gradient and down-gradient groundwater test wells were installed during construction of the landfill and are sampled and tested in the spring, summer, and fall by an independent laboratory. Test results have shown no contamination in these wells at this time. Should groundwater constituents ever exceed allowable limits, St. Louis County will take all necessary actions for mitigation and remediation to prevent further contamination. This site has been regularly inspected by the MPCA and has been found to be in compliance.

### **Re-Permitting**

At the present disposal rate, the Regional Landfill will reach permitted capacity in early 2020. The 2002 permit application also included a modification of the landfill footprint back to the original footprint of 1993 which resulted in an ultimate capacity of 4,008,800 cubic yards. The County is scheduled to submit to the MPCA an updated Permit Application in January, 2013. Phase IA of the landfill has reached design capacity and received final cover. Phase I reached design capacity in 2004. The 2.5 acre Phase 2 was constructed in 1999, the 2.8 acre Phase 3 in 2002, 2.8 acre Phase 4 in 2004, and 2.8 acre Phase 5 in 2008. These phases are currently in use. In 2012 the County constructed Phase 6, a 5.2 acre cell that will begin accepting waste in 2013. St. Louis County has prepared preliminary design for future phases of landfill development for submittal with the 2013 Permit Application which will be submitted in July, 2013.

## **12.3 Environmental and Public Health Impacts**

Due to the remote locations, there are no known environmental nor public health impacts associated with the St. Louis County solid waste facilities. Potential impacts include groundwater infiltration of untreated leachate at the Regional Landfill, storm water run-off, odors, dust and litter.

The leachate treatment ponds and landfill cells are constructed with liner walls and leak detection systems. In the unlikely event a leak occurs that poses a risk to groundwater, contingency actions will occur. These include pumping and hauling untreated leachate to the Western Lake Superior Sanitary District Waste Water Treatment system in Duluth. If a leak occurs within the landfill footprint, the leachate is pumped into the leachate treatment system.

The Regional Landfill is located approximately 1 mile from the Pike River, the nearest river or stream. Should storm water run-off from the landfill, it is captured by a series of settling ponds to keep it on-site. Storm water run-off from Transfer Stations and the Landfill, should it occur, is sampled and tested according to appropriate storm water permitting parameters.

The landfill is approximately 2 miles from residential and commercial developments to the west. To the east is several miles of open mining land. Prevailing winds at this location are generally from the west so odors have not presented as an issue. Odors at the Regional Landfill are address through the application of daily and intermittent cover. Transfer facilities are also located in remote areas, minimizing odor issues with neighboring property owners. Should odors occur waste is hauled to the Landfill and covered with daily or intermittent cover materials.

Dust issues are mitigated through the application of calcium chloride on roadways and around MSW canisters.

Litter issues are address by contracting with Sentence to Serve crews as soon as litter is detected. The Landfill Operations Contractor also hires litter personnel in the spring to collect accumulated trash blown from the landfill face over the winter months.

The Regional Landfill, Transfer Stations and Canister Sites are inspected on a routine basis by the Minnesota Pollution Control Agency. Over the past several years all facilities have been in compliance.

In addition to MPCA inspections, site attendants conduct daily site inspections at each facility. The Department also has 4 MPCA certified Type II Inspectors on staff.

The Department has an extensive system of environmental monitoring at the Regional Landfill which includes groundwater, surface water, leachate, spray field, suction lysimeter, slope stability and landfill gas components. The County contracts with Northeast Technical Services to perform sampling, analysis and reporting for environmental monitoring. Complete yearly reports are included in the Annual Report for the Regional Landfill SW-405 submitted to the Minnesota Pollution Control Agency.

There are 17 groundwater monitoring wells and three surface water sample locations in the landfill area. Levels of chloride, ammonia, nitrate + nitrite, total dissolved solids, boron, strontium and volatile organic compounds have remained stable over the life of the landfill. Surface water sampling shows similar attributes with several parameters being below laboratory reporting limits.

Untreated leachate and treated leachate samples are evaluated for perfluorinated compounds in May and October of each year. Spray field soil characteristics are sampled at four locations during the spray irrigation season. Leak detection equipment is also in place at the leachate ponds and under every landfill cell.

Landfill gases are monitored routinely at six sites and there are two additional temporary probe sites for contingency monitoring should gases be detected during regular sampling events.

The landfill is located 60 feet above the native topography, built on top of a waste rock/lean iron ore mine dump. Slope stability is monitored to determine if the additional load on the stockpile through measuring deflections in two installed inclinometer casings on the slopes of the berms.

Storm water run-off monitoring is carried out at the Landfill and Transfer Stations in compliance with current storm water permits.

The Department has a Safety Committee comprised of solid waste field staff, the Solid Waste Operations Supervisor and a representative from the County's Employee Training and Development Division. The Safety Committee reviews arising employee safety issues and recommends resolutions to Department administration. The Solid Waste Operations Supervisor is also responsible for scheduling employee training on Right-to-Know, equipment operations, PPE and other relevant issues affecting field staff.

The Landfill Operations Contractor holds a Type II Municipal Landfill Operator certification. The County requires the contractor to have a safety plan and provide necessary training to their staff on an annual basis.

Over the past five years there have been no significant safety violations or incidents involving employees, contractors or the public.

#### **12.4 Specific Programs to Be Developed**

St. Louis County has evaluated the impact of landfilling out-of-SWMA MSW at the Regional Landfill. This tonnage would be in addition to the 160 tons per day of in-SWMA MSW currently being landfilled. At this time the County intends to focus on disposal of waste generated within the service area and not solicit out-of-service area waste.

The County will evaluate options for textile recovery, sharps collection and additional recovery methodologies for electronics, HHW, waste oil, batteries and pharmaceuticals in the ensuing five years.

The County intends to expand the leachate land application field and develop a landfill gas collection and leachate recirculation system in 2013. Final cover on Cell 1 is expected to be placed in 2015. The landfill is expected to expand into Phase 7 in 2016 and Phase 8 in 2020.

#### **12.5 Responsible Person**

The Environmental Program Manager is responsible for the operation of St. Louis County's municipal solid waste disposal program along with a Planner at .50 FTE. Currently, land disposal of municipal solid waste in St. Louis County requires staffing the landfill, the transfer stations, and the canister sites totaling 21.25 FTEs. Clerical staffing requires .75 FTE. Staff supervision and program administration accounts for an additional .45 FTE. In addition, the actual operation of the landfill, the Hibbing Transfer Station, waste transportation, design engineering, and all groundwater and leachate sampling and analysis activities are conducted by contract employees.

One Solid Waste Operations Supervisor oversees the waste transfer operation contracts at .2 FTE. Assistance is provided by Planning staff at .25 FTE.

**12.6 Program Budget**

The source of funding for the operation of the landfill, the transfer stations, and the canister sites is derived from solid waste tipping fees. See Appendix B for current and proposed annual budgets.

The total cost for waste transfer in the SWMA is budgeted at \$2,679,303 for 2013. The cost is expected to remain at this level for the foreseeable future. The 2013 budget for landfill operations is \$3,806,096.

Financial Assurance is funded through tipping fees and set aside in an interest-bearing account within the County’s financial system. As reported on the 2012 Annual Report the Adjusted current costs are \$1,557,300. The balance of the County’s Financial Assurance Account on 1/1/2013 was \$3,046,684.

**12.7 Schedule of Implementation**

<b>Table 18</b>									
<b>Proposed Landfill Program Implementation Schedule</b>									
<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Re-permit Waste placed in Cell 6	LFG and Leachate Recirculation systems development	Final Closure Cell 1	Phase 7 construction				Phase 8 construction		

**Section 13 Waste Tire Disposal and Recovery**

**13.1 Policy and Goals**

The Department will comply with Minnesota Statute §115A.914 subd. 3, and MN Rules ch. 9220.0200 to 9220.0680 which require counties to address the collection and processing of waste tires in the Solid Waste Management Plan.

At present, St. Louis County has not adopted a separate solid waste tire ordinance that meets or exceeds MPCA Rules (State Statutes §115A.914, subd. 3, and MN Rules ch.9220.0200 to 9220.0680). Proper tire disposal is addressed in the Solid Waste Ordinance 45.

**13.2 Existing Waste Tire Practices**

St. Louis County contracts with Liberty Tire, which is licensed by the Minnesota Department of Transportation and the Minnesota Pollution Control Agency for the proper management of waste tires. St. Louis County has 18 facilities where waste tires are collected for proper management and disposal. The tipping fee schedule allows for the free disposal of four tires

per load for users (non-commercial only) of the St. Louis County facilities. Tires in excess of four per load are charged \$1.00 per unit for passenger tires and \$6.00 per unit for highway truck tires. St. Louis County accepts off-the-road tires and the tipping fee is based on \$165 per ton. The six weigh scale site facilities accept these off-the-road tires. The no-charge policy for a limited number of tires helps ensure that proper management and disposal of waste tires is occurs in St. Louis County. The tires are accepted at the locations listed in Appendix C.

Approximately 100 percent of the tires recycled through the County's tire management program are transported to Liberty Tire facility in Savage. In 2012, 877 tons of tires were collected.

At the onset of this program St. Louis County cleaned up three large tire dumps, two of them having in excess of 100,000 tires, thus reducing potential environmental and health impacts. The County continues to clean up tires dumped on public lands and right-of-ways. No large known unpermitted tire dumps are located in St. Louis County. One private dump containing approximately 25,000 tires was cleaned up in May 1992.

With the limited numbers of tires the County's transfer stations and canister sites are allowed to stockpile, the health impacts at these sites will be insignificant.

### **13.3 Specific Programs to Be Developed**

St. Louis County plans no specific additions to this program in the near future and is satisfied with the results in the nine years that the no-charge policy has been in place.

The transfer station permits limit the number of tires that will be stored on site and the County-contracted licensed tire transporter periodically visits these sites to ensure compliance with MPCA regulations.

### **13.4 Estimated Program Budget**

The program budget in 2013 is \$105,327 for management of waste tires at the 18 facilities in St. Louis County. It is estimated that the same level of funding will be necessary for the collection and the disposal costs in 2003 with future funding to remain at adequate levels to ensure that the same quality of program is carried out in the future. Source of program funding is the solid waste service fee.

The Deputy Director is responsible for waste tire management in St. Louis County. Approximately .10 FTE is required in St. Louis County for waste tire management.

### **13.5 Implementation Schedule**

St. Louis County will continue to implement the existing waste tire program.

## **Section 14      Electronic Products**

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

It is the policy of St. Louis County to comply with Minnesota Statute §115A.9565 which prohibits Cathode Ray Tubes (CRTs) from disposal in a landfill. To this end the County provides residents with eleven sites to drop off CRTs and other electronic equipment for recycling.

### **14.2    Existing Electronic Products Management Practices**

Computers from County facilities are collected by the St. Louis County MIS Department and sent to 5-R Processors in Wisconsin for reuse or material reclamation. Commercial waste electronic generators are referred to area licensed recyclers.

The County began collecting residential Cathode Ray Tube video display devices in 2005 as the State imposed a ban on landfilling these items. Other electronic devices are also collected at the customer's request. The department collects and recycles approximately 290 tons of electronics per year. CRTs from residential use are collected at eleven solid waste facilities (See Appendix C). A fee of \$1.00 for CRTs up to 19" diagonal and \$2.00 for larger sizes is charged for CRTs generated within the SWMA. In addition, residents are allowed to bring up to two CRTs to several of the HHW remote collections with the same fees applied.

Residents of St. Louis County are allowed to put unusable computer components and other electronics in the MSW waste stream, but are encouraged to recycle them along with the CRTs. MSW tipping fees apply.

Electronics placed in recycling collections at County Solid Waste Facilities are sent to Universal Recycling Technologies in Wisconsin. In 2012, 290.25 tons of electronics were recycled.

### **14.3    Specific Programs to be Developed**

Department staff has participated in state and regional discussions of electronics waste management. The Department will continue to make referrals to licensed electronics recyclers within the state. Staff will continue to review alternatives for land disposal of residential electronics wastes generated within the SWMA and to provide collection events for SWMA residents.

### **14.4    Program Budget**

The Department has a contract with Universal Recycling Technologies in which there is no charge for processing up to 625,000 pounds of acceptable electronic materials. Amounts over that are assessed a fee of 18¢ per pound. Under the terms of the contract it is unlikely that the County will incur costs in the foreseeable future.

The Deputy Director is responsible for overseeing the County's electronics management program. Approximately 0.1 FTE is spent on this program.

## **Section 15 Major Appliance and Scrap Metal Management**

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

St. Louis County will continue to comply with Minnesota Statute §115A.552 which ensures that St. Louis County SWMA residents will have an opportunity to recycle. St. Louis County has 16 locations where recycling opportunities for appliances are available. In addition, several private businesses within St. Louis County provide recycling opportunities for appliances. St. Louis County will continue to comply with Minnesota Statute §115A.9561 which requires appliances not be placed in mixed municipal solid waste. St. Louis County will continue with its program for the removal of capacitors and ballasts containing PCBs, the removal of fluorocarbon refrigerant gases, and the recycling or reuse of metal including mercury.

It is the policy of St. Louis County to provide residents and businesses with an opportunity to recycle scrap metal by providing convenient scrap metal collection locations throughout the SWMA. It is the County's goal to eliminate scrap metal from the landfill.

### **15.2 Existing Appliance and Scrap Metal Management Practices**

St. Louis County has 16 appliance drop-off sites as noted in Appendix C. During 2012, 709 tons of appliances were processed through this program. The County has a current contract with Central Scrap Metal Processing, which is an appliance recycler. Central Scrap Metal Processing processes the appliances on-site, at the 16 facilities, and then bales and ships for recycling. The contractor pays the County for the value of recycled materials.

To ensure that a majority of appliances are recycled in St. Louis County, no tipping fee is charged for up to two appliances per trip for appliances generated by residents or businesses within the SWMA. A signed voucher will allow more than two per trip at no charge. A fee of \$8.00 is charged to SWMA residents and businesses for appliances in excess of two per trip and for all appliances brought from outside the St. Louis County North and East Service Areas. This system allows the appliances coming into the St. Louis County collection system to have the hazardous waste components removed and the appliances recycled correctly.

Central Scrap Metal Processing is licensed by the MPCA as a hazardous waste handler which allows them to legally remove and process hazardous waste. The company holds an MPCA Refrigeration Recovery Certificate which is required by the EPA and MPCA for the proper removal of CFC's and HCFC's. Central Scrap Metal Processing annually reports to the MPCA on the amounts of hazardous waste they process.

St. Louis County has established 16 scrap metal collection locations where residents and businesses can dispose of scrap metal free of charge. Collection sites are noted in Appendix C.

Residents and businesses are permitted to dispose of scrap metal during the locations' hours of operations. In 2012, these County locations collected 614 tons of scrap metal.

In addition to the County sites, residents and businesses are also referred to several private scrap recyclers around the County. Recycling tonnages from these businesses are recorded on the annual SCORE report.

St. Louis County currently contracts with Central Scrap Metal Processing for the haulage and recycling of scrap metal collected at the County's locations.

### **15.3 Specific Programs to Be Developed**

St. Louis County will continue to fund the above major appliance and scrap metal program at adequate levels to ensure that appliances and scrap metal received at St. Louis County facilities will be properly managed. The County will continue to evaluate and monitor the program for possible enhancements to better serve the public. There are no plans for modification of the program at this time.

### **15.4 Program Budget**

In 2012, St. Louis County paid nothing for appliance processing and recycling. Revenue for the scrap metal value from appliance recycling is included in the scrap metal and totaled \$47,622.96 in 2012. 2013 revenue is expected to be \$48,000. Similar funding will be continued throughout the next 10 years. Funding for appliance recycling is derived from the SCORE revenue. It is St. Louis County's intention to receive as many appliances as possible from St. Louis County SWMA residences and businesses. It is in St. Louis County's best interest to collect these major appliances to ensure that air quality, groundwater, and human health are not adversely affected by improper disposal. By recycling and reuse of these appliances and metals, St. Louis County is exceeding the State's intention for the management of appliances. Under the current contract for scrap removal from County sites the contractor pays the County for revenue generated through the sale value of the metals.

The Deputy Director will be the responsible person for contracting for haulage and disposal of appliances. Approximately .10 FTE administration, .07 FTE Planning, .30 FTE clerical staff and 1.75 FTE field staff is assigned to this task of major appliance management.

### **15.5 Implementation Schedule**

It is the intention of St. Louis County to continue the existing program.

## **Section 16 Automotive Mercury Switches, Motor Vehicle Fluids and Filters, and Lead-Acid and Dry Cell Batteries Management**

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

St. Louis County endorses the following state policies that keep waste oil, oil filters, and lead-acid and dry cell batteries out of the waste stream and encourage proper handling of used oil resulting in the reduction of surface and groundwater contamination:

- St. Louis County endorses Minnesota Statute §115A.916 which prohibits oil and used oil filters from being landfilled.
- St. Louis County endorses Minnesota Statute §115A.915 which prohibits a person from placing lead-acid batteries in municipal solid waste or disposing of a lead- acid battery after January 1, 1988.
- St. Louis County endorses State Statute §115A.9155 which prohibits a person from placing in mixed municipal solid waste a dry cell battery containing mercuric oxide electrode, silver oxide electrode, nickel-cadmium, or sealed lead-acid that was purchased for use by a government agency, or an industrial, communications, or medical facility.

It is the goal of St. Louis County to promote the collection and recycling of waste oil, used oil filters, and lead-acid and dry cell batteries by providing collection sites for the general public. A list of County sites which accept these items is available in Appendix C. The goal of St. Louis County is to eliminate these items from being landfilled. The County's goal is also to maintain a list of all waste oil collection and battery collection sites within the SWMA.

The County does not regulate automotive mercury switches as a separate waste stream.

## **16.2 Existing Automotive Mercury Switch, Motor Vehicle Fluids and Filters, and Lead-acid and Dry Cell Battery Programs and Practices**

The County provides public waste oil collection sites at the Regional Landfill, five transfer stations, and 13 canister sites throughout the SWMA where residents can dispose of their used oil free of charge. In addition, used oil is accepted at the HHW collections if a facility is not convenient. In 2012, St. Louis County arranged with Como Lube and Supplies, Inc. to recycle 22,200 gallons of used oil with a revenue of \$1.354 per gallon paid to the County.

St. Louis County will continue to promote and encourage proper disposal of used oil to the residents of the SWMA.

The County accepts properly drained used oil filters at 19 sites throughout the SWMA. Residents are allowed to dispose of up to six used automobile oil filters, per trip, free of charge. A tipping fee is charged for all oil filters generated by businesses or commercial vehicles.

Used oil filters are also collected at the HHW collections if a facility is not convenient. The Department also maintains a list of retailers throughout the SWMA that accept used oil filters.

St. Louis County contracts with Como Lube and Supplies, Inc. for the disposal of used oil filters collected at the County facilities. The County recycled 88 - 55 gallon drums of used oil filters in 2012 at a cost of \$15 per barrel. \$1,500 is budgeted for this service in 2013.

St. Louis County will continue to promote and encourage proper disposal of used oil filters to the residents of the SWMA using funding from SCORE revenues.

The County has a well-established vehicle battery collection system that provides convenient

drop-off locations to the general public. Collection sites are managed and staffed by Department employees. In addition, lead-acid batteries are also accepted at the HHW collections. The County does not charge a tipping fee for the disposal of lead-acid batteries.

The County is providing convenient collection points to complement vehicle battery collection done by private sector scrap metal dealers, retail merchants, and automotive repair businesses.

Minnesota statutes have established a five dollar surcharge that is refundable when motor vehicle batteries are returned for recycling. Persons purchasing new vehicle batteries are exempt from the surcharge if they return a used battery at the time of purchase. As a result of this legislation, St. Louis County believes most lead-acid batteries will be collected by retailers and, therefore, does not plan to expand the number of collection sites.

St. Louis County currently contracts with Interstate Battery, Inc., for the collection and disposal of used lead-acid batteries. In 2012, St. Louis County recycled 12 tons of lead-acid batteries that were collected at the County's facilities. Residents wishing to dispose of dry cell batteries are instructed to bring the batteries to the HHW facility or remote collections. Businesses are able to dispose of dry cell batteries through the VSQG and MQG programs. In addition, the Department maintains a list of commercial establishments which accept rechargeable batteries and recycle them through the Rechargeable Battery Recycling Program.

St. Louis County allows alkaline or zinc carbon batteries to be discarded with MSW. Automotive mercury switches are allowed along with other mercury containing products in the Household Hazardous Waste program. Residents and Minimal Quantity Generators may bring them to one of the HHW facilities or remote collections.

### **16.3 Specific Programs to be Developed**

The Department considers this program to be mature and has no plans for expansion at this time.

### **16.4 Program Budget**

The 2013 budget for the automotive fluids, filters and battery program is \$5,000. Additional funds are available from the household hazardous waste budget. The source of funding for the lead-acid battery program is derived from SCORE revenue and Service Fees.

The Solid Waste Operations Supervisor will be responsible at .1 FTE for the County's used oil, oil filter and battery management program. Collection of the used oil and filters is performed by site attendants requiring approximately .30 FTE staff time.

## **Section 17 Household Hazardous Waste and Very Small Quantity Generator (VSQG) Hazardous Waste Management**

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

St. Louis County endorses and supports Minnesota Statute §115A.96 which established a statewide program to manage household hazardous waste. The goals of the County are to provide information, education, and collection opportunities to its residents for proper management of household hazardous wastes.

St. Louis County endorses Minnesota Statute §115A.932 which prohibits fluorescent bulbs and other mercury containing materials from being placed in mixed municipal solid waste. It is the policy of St. Louis County to promote the proper disposal of fluorescent bulbs by providing collection locations throughout the SWMA. It is the policy of St. Louis County to provide opportunities and promote proper disposal of all mercury containing materials.

It is the goal of St. Louis County to promote the collection and recycling of antifreeze by providing collection sites for the general public. The County's goal is also to maintain a list of all antifreeze collection sites within the SWMA.

In addition the Department has long recognized the need to assist Very Small Quantity Generators (VSQG's) and Minimal Quantity Generators (MQG's) in the SWMA with the disposal of their hazardous wastes. Problems confronting VSQG's and MQG's trying to dispose of their hazardous waste include: commercially generated hazardous waste cannot be placed in the landfill.

- Commercially generated hazardous waste cannot be accepted at the HHW collections.
- The majority of VSQG's and MQG's in St. Louis County do not generate enough hazardous waste to warrant regular pickup by a HW collector.
- Long distances to licensed hazardous waste disposal facilities make delivery of VSQG and MQG hazardous waste uneconomical and impractical.

St. Louis County's long-range goal is to provide an opportunity for VSQG's to conveniently dispose of the hazardous wastes they generate. To this end the County contracts with the WLSSD Clean Shop program to provide a minimum of three collections each year in the northern part of the County. The County's HHW program has also received permission from the MPCA to accept MQG wastes at the two HHW facilities.

### **17.2 Existing Programs and Practices**

St. Louis County has household hazardous waste collection and storage facilities on its land adjacent to the Regional Landfill and at the Hibbing Transfer Station. The facility near Virginia was funded in part with a grant from the OEA. A \$184,400.00, nine-hundred square foot expansion of the Virginia facility was constructed in 2012. The Hibbing facility was built with Department funding as part of the new MSW transfer station. Both facilities provide year round access to HHW drop off which had not been previously available to SWMA residents. The Regional Landfill location is open on Tuesdays and Saturdays, and the Hibbing location

is open on Saturdays.

The County purchased a transportation vehicle in 1998 which is used to conduct remote area collections and to transport processed HHW to the regional HHW program facility in Duluth. Through the Department's contract with WLSSD, residents of the Department's SWMA may also bring their HHW directly to the regional facility in Duluth.

The County HHW program provides remote collections throughout the SWMA during the summer months, and year-round drop-off at the two County HHW facilities located near Virginia and Hibbing. The HHW brought into the County HHW program is lab-packed or bulked, manifested, and picked up by the State HHW contractor or transported by County staff to the WLSSD facility where arrangements are made for proper disposal of the materials. St. Louis County pays WLSSD for the contract administration, support and disposal costs.

Currently, the County also contracts with WLSSD to provide drop-off service for three VSQG collections per year. St. Louis County pays \$1,000 per collection and provides advertising and collection facility space. In addition, County staff is present at these collections to collect waste fluorescent tubes. The WLSSD VSQG program provides staffing, equipment and supplies for these collections. Participants pay a fee to participate as well as the cost of disposal for their waste materials.

The collections are held at County solid waste facilities and township properties throughout the Department's service area. St. Louis County provides advertising for all collections and requests that VSQG participants call the Clean Shop's toll-free number to schedule appointments at sites which are heavily used. VSQG participants make direct connection with the WLSSD program. Collection event advertising includes paid newspaper advertisements, flyers, fact sheets, public access television, and radio announcements as well as township, city and Chamber of Commerce newsletters. During 2012 the Department spent \$10,962 in advertising for HHW and VSQG collections.

The Department's HHW program also provides storage and disposal options for local law enforcement agencies when clandestine drug labs are dismantled.

Staffing for the HHW collections is comprised of Department staff with back-up site management contracted through WLSSD staffing. All workers receive training prior to the collection events in conformance with MPCA guidelines.

Any usable material brought to the collections is offered to the public free of charge through the product exchange at the County HHW facilities. The exchange program promotes product reuse while reducing disposal costs to the County.

Minimal Quantity Generator wastes may be brought into the County HHW program. This provides a more convenient disposal opportunity and keeps more hazardous wastes out of the landfill. Since commercial participants pay for disposal this does not add significant cost to the County.

Residents can dispose of all sizes and shapes of fluorescent tubes for free through the HHW

program. In addition, the County accepts four foot fluorescent tubes and compact fluorescent bulbs (CFL's) at 23 solid waste facilities. Residents (non-commercial only) are allowed to dispose of six fluorescent tubes or CFL's per load free of charge. A list of facilities which accept fluorescent tubes can be found in Appendix C.

Tipping fees are charged for all fluorescent tubes generated by businesses and commercial sources and for residents disposing of more than four 4-foot fluorescent tubes per trip. The County currently contracts with Veolia for the recycling of fluorescent bulbs collected at the County facilities. In 2012, approximately 7 tons of fluorescent tubes and other mercury containing materials were collected at County facilities and through the HHW, MQG and Clean Shop Programs.

The County accepts used antifreeze at ten sites throughout the SWMA as listed in Appendix C. Four types of antifreeze are accepted. The type of antifreeze must be identified for disposal at the facilities. Como Lube processes the antifreeze. Residents are allowed to dispose of their antifreeze at no charge.

### **17.3 Specific Programs to be Developed**

The County HHW program is currently established and successful. Collection locations are modified on an annual basis. In the future cold storage capability at the Virginia facility will be expanded and facility hours may be expanded if there is a demonstrated need.

The County will continue to contract with WLSSD for contract administration, and staff support. Pick up and disposal with the State HHW contractor will continue to be on an as- needed basis.

### **17.4 Program Budget**

The Solid Waste Operations Supervisor is designated the responsible person for the County's household hazardous waste program. Support staff include the HHW Specialist, a Solid Waste Technician and trained Solid Waste Workers. Total HHW staffing is at 2.65 FTE. The Solid Waste Operations Supervisor (.06 FTE) is responsible for overseeing the County's fluorescent bulb collection and antifreeze recycling programs. Approximately .5 FTE of Field and HHW Staff time is spent on this program.

St. Louis County's 2013 budget for the household hazardous waste program is \$284,422, with funding derived from the solid waste service fee and SCORE funds. VSQG program contract costs are currently funded through service fees. VSQG's are required to pay for the disposal of their hazardous waste as well as an administrative fee.

St. Louis County has budgeted \$4,600 for the collection and disposal of fluorescent bulbs in 2013. Funding for the program will be derived from SCORE revenue.

There is \$650 per year allocated in the County's budget for the antifreeze program with funding derived from SCORE revenue.

## **Section 18 Construction and Demolition Debris**

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

It is the policy of St. Louis County to provide safe and accessible waste disposal services at the lowest possible cost to its citizens and to dispose of those waste materials in a manner that ensures the protection of the environment. It is also the policy of the County to promote proper management of private demolition disposal facilities within the SWMA in order to protect the environment.

It is the goal of the County to find cost-effective alternatives to land disposal for these materials in the future. Alternatives include the reuse of glass and bituminous materials in new pavement, the reuse of concrete, brick, or masonry in drainage or septic systems, and the use of wood materials for composting, erosion control or fuel.

### **18.2 Existing Construction and Demolition Debris Practices Program**

St. Louis County owns four closed demolition landfills. Three of these have been closed since the last revision to the Solid Waste Management Plan.

The County accepts demolition material at the St. Louis County Regional Landfill, at the Brookston, Cook, Hibbing, Hudson (Aurora), and Northwoods transfer stations, and at the County Highway #77, Portage, French and Soudan canister sites. At these locations, demolition material is placed in roll-off containers or semi-trailers and is transported to a private demolition landfill for final disposal. The roll-off containers range from 30 cubic yards to 50 cubic yard, depending on space availability at the site. Roll-offs up to twenty (20) cubic yards will be accepted for unloading at the storage/processing pad. Because of limited space and the current equipment on-site to handle the waste, larger roll-offs are unacceptable.

Demolition debris is thoroughly screened by the site operator before being accepted at any County facility and is monitored during and after unloading. Any materials not identified as acceptable will be refused by the site attendant. If the waste contains unapproved materials it will be rejected, and then must be transported to the Regional Landfill in Virginia. If a roll-off is unloaded and found to contain unacceptable material, the contractor will have the option of cleaning/sorting the material to the County's satisfaction or a \$75.00 per hour clean-up charge will be applied to the customer's bill at the time of the transaction or in a separate billing when waste is discovered after unloading.

It is the practice of the Department to reduce landfilling and facilitate recycling of demolition material. Concrete, asphalt and shingles are collected and stored in separate stockpiles for future utilization. In 2011, 350 tons of ground shingles were used in paving the Regional Landfill access road.

The County's demolition debris management program is fully funded through tipping and disposal fees. The annual budget includes costs for haulage and site staffing. The County

sets aside a \$.50 per cubic yard surcharge into a separate fund along with funds collected from private facilities in accordance with Minn. §115A.919.

There are currently three private permitted demolition landfills within the SWMA. These facilities are required under Ordinance 45 to obtain an annual license for operations from the Department. As condition of this license these facilities must submit a copy of their MPCA Annual Report so that the County may track their activities. These facilities are also required to submit regular surcharge reports to the Department. A credit toward that surcharge is granted for facilities with an approved recycling program and/or an approved liner system. This credit is included as an incentive to reduce demolition landfill volumes.

<b>Table 19</b>				
<b>Demolition Landfills in St. Louis County SWMA</b>				
Facility Name	MPCA Permit #	Location	Materials Accepted	Ultimate Design Capacity <i>(includes cover)</i>
Cliff's-Erie	SW-619	Aurora	Proprietary waste materials only	1,086,000 cubic yards
Veit Northland Demolition LF	SW-549	Hibbing	Demolition Materials	105,000 cubic yards (currently not accepting wastes)
Waste Management Voyager LF	SW-428	Canyon	Demolition and Industrial Waste	5,735,739 cubic yards

**18.3 Specific Programs to be Developed**

County staff is currently reviewing alternative demolition processing options which include source separation, reuse, grinding and hauling, as well as alternative uses for aggregate, pavement, mulch and bio-fuel.

**18.4 Program Budget**

The County has implemented a surcharge under the authority of Minnesota Statute §115A.919. The purpose of these fees is to establish funding for landfill abatement purposes, or costs associated with closure, post closure care, and response actions or for purposes of mitigating and compensating for the local risks, costs, and other adverse impacts of facilities. The intent is to avoid passing all future costs of these facilities on to future residents. St. Louis County will review the implementation of these fees in order to: (1) determine if there are ways that the fees can be levied in such a fashion as to achieve the same end result and more minimally impact the operators of the facilities; (2) extend the fees to the disposal of all mixed municipal solid waste within the service area, in order to establish funding for expected perpetual care responsibilities; (3) update and formalize usage plans for

the reserved funding; and (4) upgrade the Department's tracking and implementation of the fee program.

The Department will annually review the implementation of these fees to evaluate consistency and effectiveness.

In 2013 budget for the demolition management program is \$283,478. Funding for the program is derived from tipping fees and Solid Waste Service fees. Funding for the private demolition landfill program is derived from facility licensing fees.

One Solid Waste Program Administrator is responsible for the County demolition debris management program. Required administrative time for the County program is .02 FTE and .03 Planning staff.

The Deputy Director is responsible for overseeing the administration of licenses and surcharges at .08 FTE. The two Solid Waste Planners review license applications, track waste volumes and surcharge payments and provide technical assistance. Required staff time for this is .15 FTE.

## 18.5 Schedule of Implementation

<b>Table 20</b>									
<b>Proposed Demolition Material Program Implementation Schedule</b>									
<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Concrete grinding	Proposals for Demo Processing	Evaluation of site usage	Asphalt processing		Biofuel recovery analysis				
Tip fee analysis									

## Section 19 Salvaging and Reuse

### 19.1 General Policies and Goals

In accordance with St. Louis County's commitment to encourage recycling and reuse of materials when possible, residents are allowed to recover materials that would normally be landfilled as MSW or demolition waste or cost the County money to recycle.

### 19.2 Existing Program

Residents are allowed to recover reuseable qualities of tires, scrap metal, lumber or other building materials, and household goods at all of the Solid Waste Disposal facilities. A Waiver of Liability must be signed by the person requesting to remove the items. The waivers are kept on file at the site for a period of 2 years.

### **19.3 Responsible Person**

The Solid Waste Operations Supervisor is responsible for overseeing the salvaging and reuse program.

### **19.4 Program Budget**

There is no cost involved with this program. It is not necessary to include it in the budget.

## **Section 20 Solid Waste Ordinance**

It is the intention of St. Louis County to protect the health of the public and the environment within its borders. Minnesota state law (Chapter 400) authorizes counties to conduct solid waste management programs, requires that counties provide for the periodic inspection of MSW facilities, requires that counties take steps to bring out-of-compliance facilities into compliance, and enables counties to establish by ordinance rules, regulations, and standards for solid waste management. One tool counties make use of in administering local programs is development and administration of county solid waste ordinances.

### **20.1 Ordinance Status**

The County initially adopted Solid Waste Ordinance No. 45 to take effect on January 1, 1994. Previous to this ordinance, the County enacted Ordinance No. 8 and Ordinance No. 32A; these ordinances were repealed with the passage of Ordinance No. 45 (Appendix G.) The County has since amended the solid waste ordinance several times, most recently on August 1, 2008.

### **20.2 Implementation and Enforcement Issues**

The principle areas for which the solid waste ordinance has been used to date are the areas of licensing, haulers requirements, surcharge and service fee implementation and enforcement of proper storage and disposal of waste materials. There have been no issues or problems implementing or enforcing the current ordinance.

### **20.3 Planned Amendments**

The ordinance will be evaluated on an ongoing basis to determine needed improvements and to make changes necessitated by State statute or rule revisions. There are no planned revisions to Ordinance 45 at this time.

St. Louis County will also continue to analyze its solid waste management service charges for equity and effectiveness. Fees and surcharges are reviewed by the County Board on an annual basis and set at a public hearing. In the event that the County determines that changes are needed in the fees or service charge systems, Ordinance No. 45 will be changed to reflect those changes.

## **20.4 Responsible Person**

The Director of the St. Louis County Environmental Services Department is responsible for overseeing and directing the activities of the St. Louis County Solid Waste Program. Specific duties regarding administration of Ordinance No. 45 are delegated to the Deputy Director (fees and service charges, enforcement), the Solid Waste Program Administrators and Solid Waste Operations Supervisor (enforcement, inspection). Other department staff also have inspection activities, and all department staff are responsible for noting and reporting violations, educating the public regarding proper practices, and carrying out the duties of the department.

The County also devotes additional resources to implementing the ordinance, including:

- St. Louis County has assigned a .4 FTE Deputy position from the Sheriff's Department to carry out enforcement activities;
- the County Attorney's Department has staffing provided for ordinance violations prosecution, ordinance amendment activities, and related activities;
- the County Auditor carries out service charge provisions; and
- other county employees conduct related activities as needed.

## **20.5 Program Budget**

Maintenance of the Solid Waste Ordinance is considered part of customary staff duties for the purposes of this plan it is estimated that approximately \$4,000 was expended on ordinance maintenance during 2012. It is estimated that during 2013 approximately .07 FTE administration and .02 FTE planning staff time was spent on review of Ordinance 45 by the Director and Planner.

# **Section 21 Solid Waste Staff**

## **21.1 Existing Staff**

Currently the County has authorization for 43 full time equivalent (FTE) positions for its solid waste programs. Thirty-seven (37.55) FTE positions are currently filled by county staff. Five positions are currently vacant. The County has 1 FTE Building Maintenance Worker assigned to solid waste facilities. In addition, the Department funds and receives support from various other St. Louis County Departments including the County Attorney's department, the Sheriff's Department, the County Auditor's Department, the Management Information Systems Department, Civil Service, Employee Training and Development, and the County Administrator's Department.

Staff supervision and administration includes .02 FTE Program Administrator, .40 FTE Solid Waste Operations Supervisor, .04 FTE Director, .2 FTE Planner and .75 FTE Clerical staffing.

The County also contracts for many County solid waste program functions with private businesses, including:

- a contract with a local firm for landfill operations including compaction and daily cover material application, plowing, and site work;
- a contract with a local firm for Hibbing Transfer Station operations;
- a contract with a local firm for leachate system management;
- contracts with various firms for waste haulage from the canister sites and transfer stations to the Regional Landfill;
- contracts for mattress and box springs, electronics, waste oil, oil filters, tires, appliances, scrap metal and antifreeze processing and hauling;
- contract with a local firm for recycling roll-off collection and processing;
- a contract with a local firm for processing and marketing curbside collected recyclables; contracts with range cities for curbside recycling activities;
- contracts with engineering firms for technical assistance; and
- contracts with firms for appliance management, battery management, scrap metal management, and other waste component-specific management activities.

## **21.2 Staffing Needs**

The County will continue to refine its staffing needs over the next ten years with the goals of keeping costs low, providing necessary levels of service to customers, enabling a strong private sector presence in the County waste system, and providing a reasonable working environment for county employees.

## **Section 22 Solid Waste Program Funding**

### **22.1 Policies and Goals**

St. Louis County is committed to operating a solid waste program that meets or exceeds state requirements and satisfies the needs of SWMA citizens. Funding will be provided consistent with goals established throughout this plan.

### **22.2 Existing Solid Waste Funding Practices**

The Department currently receives funding from five sources: 1) tipping fees charged at solid waste facilities; 2) solid waste service fees; 3) state funding provided to assist in funding recycling programs (SCORE); 4) license and surcharge fees; and 5) fees received from leasing property for operation of a contaminated soil treatment facility.

The County is also exploring development or utilization of other funding mechanisms, including:

- securement of additional tipping fee revenue through acceptance of additional types of waste or of waste from outside of the SWMA;
- state solid waste processing facility, programmatic, and HHW grants;
- regional funding grants; and
- revenue developed from other utilization of county properties.

Current year and future projected amounts of funding are included in the budget included as Appendix B.

### 22.3 Amounts and Sources of Funding

Tipping Fees	\$ 2,807,271
Services Fees	\$ 2,459,007
Recycling Revenue	\$ 510,000
Special Waste Revenue	\$ 20,808
Grant funding and stipends	\$ 502,000
Licensing	\$ 9,225
Other	\$ 180,993
Fund balance contribution	\$ 1,353,500
<b>Total Revenue</b>	<b>\$ 7,842,803</b>

## Section 23 Plan Review and Ten-Year Plan

### 23.1 Plan Development Time Line

Annual review of the Solid Waste Management Plan is scheduled for the fourth quarter of each year throughout the 10-year time line.

### 23.2 Plan Development Process

Any modifications or amendments to this Plan will be submitted in writing to the MPCA for review and approval. A new plan is required every ten years.

### 23.3 Responsible Person

The entire Department staff will have input into updating and amending the plan. Staff time is anticipated to be .05 and will increase dependent upon number and complexity of amendments made to the plan.

### 23.4 Program Budget

Annual review of the plan and ten year revision are included in the staff and administration section of the Department budget, with the solid waste service fee being the funding source.

## **Section 24      Goal-Volume Table**

The Goal-Volume Table is included as Appendix A.

## **Section 25      Itemized Solid Waste Budget**

### **25.1    Annual Department Budget Development Activities**

St. Louis County develops its bi-annual solid waste budget through the County's overall annual budgeting process. This process includes:

- development of department-specific budget information;
- submittal of departmental information to the administrator's office for review and
- incorporation in general County budgets;
- presentation of budget information to the Solid Waste Subcommittee, and Board of
- Commissioners;
- Board of Commissioners budget review;
- a public hearing on the budget;
- and final budget adoption.

Factors taken into account in budget development include:

- evaluation of Key Performance Indicators;
- predicted revenues and expenditures;
- existing contractual commitments; and
- future program needs.

### **25.2    Itemized Solid Waste Budget for Long Term Planning**

The Department is committed to maintaining a cost-effective integrated solid waste management program. Towards that end, the County intends to conduct ongoing planning and ongoing analysis of the potential costs of various solid waste options. The County supports planning staff and administrative staff capable of conducting most system evaluations. The County will contract on an as-needed basis for additional outside expertise. The County has set aside funding for future costs of facility planning and construction from the Department fund balance; additional budgeting to raise funds for those activities is not needed.

- a) 10-year Budget. Appendix B contains the current budget projections for proposed solid waste program costs.
- b) Financial Assumptions. Given the dynamic nature of the solid waste industry and of solid waste in general, it is difficult to make any long-term assumptions about solid waste. Changes in private firms that the County contracts with for services can have

significant impacts on program needs and future expenditures. Changing availability of solid waste processing capacity can affect future financial planning. Changes in State and Federal programs and funding can impact future County program and financial planning. Other factors can change. For purposes of planning, the following general assumptions are made:

- Development of demolition processing in 2015.
- Development of localized organic waste composting program in 2020.
- Construction of new phases of landfill at appropriate periods.
- Status quo contracting of recycling, hauling, leachate collection, landfill operations, and other services.
- Same level of county staffing.
- Same level accrual of revenues (assuming stable waste stream because of waste reduction and a slight increase in population). Disposal of SWMA wastes at facilities planned for by County.
- Same level regulatory requirements and expenditures. Ongoing availability of SCORE funding.

## **Section 26      Alternatives to Proposed System**

### **26.1 Short-term Alternatives**

The St. Louis County Regional Landfill in Virginia, Minnesota, meets the needs for final disposal of all of the MSW generated in the SWMA. If the Regional Landfill cannot accept waste, it would be delivered to landfills outside the service area during the short term.

The short term option chosen would be based on convenience, cost of tipping fees and transportation, and the potential long-term liability.

### **26.2 Long-term Alternatives**

If the Regional Landfill is closed for an extended period of time, waste would be delivered to either an MSW transfer station at WLSSD in Duluth, Minnesota; Itasca County Transfer Station for transfer to the Waste Management landfill in Elk River, Minnesota; East Central Solid Waste Facility near Mora, Minnesota; the City of Superior, Wisconsin MSW landfill; or to landfills potentially available to the County. The final choice would be based on several criteria, including the cost of tipping fees, contract arrangements available, transportation, whether or not the facility would process or landfill the waste, and the potential long-term liability.

## **Section 27      On-site and Illegal Disposal (Environmental and Public Health Impacts)**

### **27.1 On-site Disposal**

The County strives to mitigate impacts to land, air, surface and ground waters and to avoid nuisance conditions from the on-site disposal of mixed municipal solid wastes. To this end, the Department provides solid waste disposal services for all areas of the SWMA. It is the goal of St. Louis County to eliminate the illegal disposal of waste materials by SWMA residents through a solid waste system that provides convenient, accessible, affordable, and environmentally-safe disposal options. Some SWMA residents use private or municipal sanitation services to transport their waste to one of the County's solid waste facilities or they may choose to transport their waste to those facilities themselves. These solid waste facilities consist of 18 canister sites, five transfer stations, two "sit" sites, and the Regional Landfill. These facilities are located throughout the SWMA (see map in Section 2.2B). Even in the most remote areas of the SWMA, canister sites are located approximately twenty miles apart to encourage and facilitate proper waste disposal.

The Department also has built two household hazardous waste storage and collection facilities to further assist SWMA residents in properly disposing of waste materials. This service is supplemented with a collection vehicle which conducts scheduled household hazardous waste collections in remote areas of the SWMA during the summer months.

In addition, St. Louis County will promote the proper disposal of waste materials through its community education and outreach programs. These programs will advise the general public on the proper disposal of waste materials, will work with community groups to provide additional disposal services, and will explain the consequences of improper waste disposal.

### **27.2 Illegal Disposal**

The County strives to mitigate impacts to land, air, and surface and ground waters from illegal disposal of wastes. Although it is the goal of St. Louis County to eliminate illegal disposal of waste materials, some of these illegal disposal sites may still exist. The St. Louis County Solid Waste Ordinance No. 45 (Appendix G) addresses this issue. If illegal disposal complaints are received by the Department, staff is dispatched to the site to investigate. If illegal disposal is verified, a St. Louis County Sheriff's Deputy assigned to environmental enforcement visits the property owner documenting the conditions at the site which constitute the illegal disposal and directing the property owner to remediate those conditions through proper disposal practices. In most past cases the property owner has complied with the Department's directions and no further action has been necessary. However, when further enforcement actions have been necessary, the Deputy is able to issue a citation for the violation in accordance with Ordinance #45 and State Statutes.

It is the intent of the Department to discourage illegal disposal of waste materials through community education programs and by providing convenient, accessible, affordable disposal services to its citizens with enforcement actions being taken only when necessary.

### **27.3 Responsible Person**

The Deputy Director is the responsible person for Risk Mitigation and Enforcement Programs along with a Sheriff's Deputy who visits and inspects for violations at approximately .15 FTE. Voluntary compliance is first and foremost, but in some cases after ample time has been given for compliance of the violation and it has not been corrected, a citation will be issued. The County Attorney's office assists in prosecution on an as-needed basis.

### **27.4 Program Budget**

The County cost for risk mitigation and enforcement during 2013 was \$50,000. Funding for the program is derived from the solid waste service fee.

## **Section 28 Solid Waste Facility Siting Program**

**28.1** St. Louis County Solid Waste Ordinance 45 and Planning and Zoning Ordinance 46, along with MPCA rules regulate the site of waste disposal facilities within the SWMA. The Certificate of Need for MSW disposal will be issued in its entirety to the St. Louis County Regional Landfill. No further MSW landfill capacity is needed in the SWMA.

**28.2** The Department conducted a study to determine the feasibility of potential organics and materials recovery facilities in the northeast portion of the county. Future evaluation of feasibility of source separated organics process in Virginia will take place early in the next planning period. Evaluation of demolition material processing is on-going. There are no other new County facilities planned, however the County will react to changes in need within its jurisdiction in order to ensure that convenient service is provided. The County will include public participation in all relevant phases of future determination of the type of facility to be developed, the types of compost markets utilized, and the methods used for financing the facility. The County will comply with all MPCA, DNR, EQB, and other regulations regarding development of the facilities.

**28.3** The County continues to assess the costs and/or benefits of current site locations. The Department will incorporate public participation in decisions which would affect current or future solid waste management siting.

## **Section 29 Public Participation and Citizen's Advisory Committee**

- Historically, St. Louis County has conducted extensive public participation activities as part of its solid waste management planning and implementation activities. Examples of this include:
- The County established four citizen advisory groups to advise the Department on solid waste activities. These groups have been consolidated into one advisory group which will meet as significant changes are expected in the County integrated waste management system.
- The Solid Waste Department conducted meetings of the six range cities involved in curbside collection programs to discuss and implement program improvements and receive city input. At

this time these programs are mature and meetings are held only if significant changes are implemented.

- The County Board of Commissioners has established a Solid Waste Subcommittee comprised of four of the seven commissioners. This group meets quarterly basis to discuss solid waste plans and programs, hear comments and presentations from vendors, other interested parties and the public, and make management recommendations to the full Board. Meetings of this group are public and are advertised in the manner of all county board meetings.
- The County Board of Commissioners discusses solid waste management issues on a regular basis and makes all overriding solid waste program decisions.
- Department staff attends local government meetings, citizen meetings, and other events to receive input and explain the County's programs.

Meeting documentation is contained in County Board and Department minutes, local units of government minutes, and staff records and on the Department's page of the County's web site. The Department also provides all of the townships in the service area with periodic information packets containing update information on solid waste activities.

The County will continue to strengthen its public participation programs. Steps that will be taken in order to do this include:

- The County is broadening its educational outreach activities to keep the public informed of current issues and decisions and solicit input.
- The County will develop and staff issue-specific advisory groups as needed in order to address individual issue needs. An example of this was the public discussion meetings in 2001 of an advisory group to review County service fee issues in the nine townships north of Duluth.
- The County will maintain citizen oversight for enforcement activities.
- The County will strengthen and expand contacts with state enforcement and planning advisors.

# Appendix A Goal-Volume Table

**Waste Stream Data Input Page**

St. Louis County 2013  
M:\Solid Waste\planning\2013 SWM Plan\Goal-Volume-Tab & 2-3.xlsx Data Input Page

Spreadsheet Date & Name for reference

Name of County: St. Louis  
Base Year: 2012

Note: Fill in all the values in column "B" completely before entering data for the follow-on years

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
		Plan Yr #1	Plan Yr #2	Plan Yr #3	Plan Yr #4	Plan Yr #5	Plan Yr #6	Plan Yr #7	Plan Yr #8	Plan Yr #9	Plan Yr #10
Population / MSW Change / yr -- County SWMA data	-0.051%	-0.051%	-0.051%	-0.051%	-0.051%	-0.051%	-0.051%	-0.051%	-0.051%	-0.051%	0.051%
Population for Year 2012	84,984	84,941	84,897	84,854	84,811	84,768	84,724	84,681	84,638	84,595	84,630
Persons per Household (St. Demographer data)	1.68										
Commercial/Industrial/Institutional waste % of MSW	15%										
Lbs / Capita / day MSW gen for On-Site Disposal (PCA #)	4.0										
Population using On-Site Disposal of MSW	470	469	468	467	466	465	464	463	462	461	460
Population % using On-Site Disposal	0.55%	0.55%	0.55%	0.55%	0.55%	0.54%	0.54%	0.53%	0.53%	0.53%	0.52%
<b>Calculated Total MSW Generated</b>	<b>120,459</b>	<b>120,389</b>	<b>120,337</b>	<b>120,276</b>	<b>120,215</b>	<b>120,154</b>	<b>120,093</b>	<b>120,032</b>	<b>119,971</b>	<b>119,910</b>	<b>119,849</b>
<b>ON-SITE-DISPOSAL - tons</b>	<b>343</b>	<b>342</b>	<b>342</b>	<b>341</b>	<b>340</b>	<b>339</b>	<b>338</b>	<b>337</b>	<b>336</b>	<b>335</b>	<b>334</b>
<b>RECYCLING - tons &amp; Percent Objectives</b>	<b>14,845</b>	<b>14,443</b>	<b>14,440</b>	<b>14,433</b>	<b>14,426</b>	<b>14,419</b>	<b>14,411</b>	<b>14,404</b>	<b>14,396</b>	<b>14,389</b>	<b>14,381</b>
Residential	47,731	42,139	42,116	42,097	42,078	42,059	42,033	42,012	42,000	42,000	42,000
Commercial/Industrial/Institutional (documented)	115	120	120	120	120	120	120	120	120	120	120
Organics Recycling (source separated+food+people livestock)	5,074	5,085	5,085	5,085	5,091	5,098	5,100	5,102	5,104	5,106	5,108
Mechanical/Hand Sorted @ Resource Recovery Facility	67,525	61,793	61,764	61,735	61,703	61,672	61,644	61,617	61,590	61,563	61,536
Problem Materials - Banned + Other Recycled											
<b>RECYCLING TOTAL - tons</b>	<b>67,525</b>	<b>61,793</b>	<b>61,764</b>	<b>61,735</b>	<b>61,703</b>	<b>61,672</b>	<b>61,644</b>	<b>61,617</b>	<b>61,590</b>	<b>61,563</b>	<b>61,536</b>
% Residential Recycling - Objectives	12.4%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.5%	12.5%	12.5%
% Commercial / Industrial / Institutional - Objectives	38.7%	35.0%	35.0%	35.0%	35.0%	35.0%	36.0%	36.0%	36.0%	36.0%	37.0%
% Organics Recycling (source separated) - Objectives	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
% Mechanical/Hand Sorted @ Res. Rec. Fac. - Objectives	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Problem Materials - Banned + Other - Objectives	4.2%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
<b>Total Recycling Percentages (Actual)</b>	<b>66.4%</b>	<b>63.1%</b>	<b>63.1%</b>	<b>63.1%</b>	<b>63.2%</b>	<b>64.2%</b>	<b>64.2%</b>	<b>64.7%</b>	<b>64.7%</b>	<b>64.7%</b>	<b>65.7%</b>
SCORE Co. Yard Waste Recycling Activity CREDIT (5%)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
SCORE Source Reduction Program Activity CREDIT (7% max)	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
SCORE Co. Recycling Rate (35% Legislative Objective)	64.4%	61.1%	61.1%	61.1%	61.2%	62.2%	62.2%	62.7%	62.7%	62.7%	63.7%
<b>Calculated MSW AVAILABLE FOR Resource Rec. + LF</b>	<b>52,181</b>	<b>58,263</b>	<b>58,231</b>	<b>58,200</b>	<b>58,042</b>	<b>56,803</b>	<b>56,773</b>	<b>56,743</b>	<b>56,113</b>	<b>56,083</b>	<b>54,916</b>
<b>Destination LF's for Co's MSW; Facility Type, &amp; Location</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>RESOURCE RECOVERY FACILITY from the County</b>											
None											
% Mechanical or Hand Materials Recycling to RR											
Mechanical or Hand Materials Recycling to RR - tons											
Non-Processible MSW & Bypass MSW %											0.0%
Non-Processible MSW & Bypass MSW - tons											
% Mechanical or Hand Materials Recycling to RR											0.0%
Mechanical or Hand Materials Recycling to RR - tons											
Non-Processible MSW & Bypass MSW %											
Non-Processible MSW & Bypass MSW - tons											
<b>Total Tipped MSW at RR Facilities</b>											
Total Mechanical or Hand Materials Recycling at RR											
Total Non-Processible MSW & Bypass MSW - tons											
<b>Total Co MSW to RES REC Fac Combuster - tons</b>											
% of Total MSW to WTE Combuster	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Mary McQuinn  
307 First St. S., Ste. 115  
Virginia, MN 55792  
Fax: 218-749-0650  
Phone: 218-749-0648  
mcreynolds@stlouiscourt.gov

**Recycling of Problem Materials/HHW:** (enter only the documented recycled tons the county is aware of below in the yellow cells)

MSW Change & Population Change / yr

List the Problem Materials tonnage values the county has documented values for and show anticipated increases due to improved recycling efforts.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Electronics	293.8	293.8	293.8	293.8	294.4	295.0	295.8	296.6	297.4	298.2	299.0
Fluorescent & HID Lamps	6.9	6.9	6.9	6.9	6.9	7.0	7.1	7.2	7.3	7.4	7.5
Household Hazardous Waste	72.3	72.3	72.3	72.3	73.6	75.0	75.6	76.2	76.8	77.4	78.0
Latex Paint	-	-	-	-	-	-	-	-	-	-	-
Mattresses	88.8	88.8	88.8	88.8	90.4	92.0	92.6	93.2	93.8	94.4	95.0
Pallets	-	-	-	-	-	-	-	-	-	-	-
Textiles / Carpet	-	-	-	-	-	-	-	-	-	-	-
Unspecified/Other	-	-	-	-	-	-	-	-	-	-	-
PM's Legislatively Banned from Landfill Disposal											
Appliances	1,465.0	1,465.0	1,465.0	1,465.0	1,467.5	1,470.0	1,470.0	1,470.0	1,470.0	1,470.0	1,470.0
Antifreeze	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
Oil Filters	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
Tires (includes tire sidewall construction)	1,564.1	1,564.1	1,564.1	1,564.1	1,564.1	1,564.1	1,564.1	1,564.1	1,564.1	1,564.1	1,564.1
Used Oil	1,408.0	1,408.0	1,408.0	1,408.0	1,408.0	1,408.0	1,408.0	1,408.0	1,408.0	1,408.0	1,408.0
Vehicle Batteries	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8
<b>Problem Material Recycling Totals</b>	<b>5085</b>	<b>5085</b>	<b>5085</b>	<b>5085</b>	<b>5091</b>	<b>5098</b>	<b>5100</b>	<b>5102</b>	<b>5104</b>	<b>5106</b>	<b>5108</b>

**FOR YOUR INFORMATION for comparison on the PCA's hypothetical Problem Material Generation Values for the County**

Background information: PROBLEM MATERIALS GENERATION RECYCLED values used for MPCA SCORE generic baseline values

	SCORE Generic Calculated Tonnage
Population 84,984	
Appliances: #/cap/yr & Total = 0.10 # / appl/yr = 8,498 Lbs/appliance = 150	585.9
Batteries: # / cap/yr & Total = 0.33 # / batteries/yr = 28,045	
pounds / battery = 40	
Recycling Rate & TONS = 93%	521.6
Fluorescent Tubes: # / cap/yr & Total = 2.4	
IF Actual Collected = 5,400	6.8
Tires: # / cap/yr & Total = 1 # per tire = 20 (note excludes sidewalls)	
Recycling Rate & TONS = 26%	176.8
Oil filters: # / cap/yr & Total = 1.78 Oil filters/yr = 1	
Recycling Rate & TONS = 36%	37.2
Used Oil: gal/cap/yr & Total gal = 4.0 Used oil Lbs/gal = 33.8	
Recycling Rate & TONS = 5.8%	68.9
<b>Total</b>	<b>1,296.7</b>





# SUMMARY DATA - Waste Management SYSTEM OBJECTIVES for the St. Louis County Solid Waste Management Plan

	2012	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>	56.4%	<b>53.1%</b>	<b>53.1%</b>	<b>53.1%</b>	<b>54.2%</b>	<b>55.7%</b>	
<b>Resource Recovery</b>	0.0%	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Landfill</b>	43.3%	<b>48.4%</b>	<b>48.4%</b>	<b>48.4%</b>	<b>47.3%</b>	<b>45.8%</b>	
<b>On-Site Disposal - burned / buried</b>	0.3%	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	
<b>Recycling % Detail</b>							
Residential recycling %	12.4%	12.0%	12.0%	12.0%	12.0%	12.5%	
Commercial recycling %	39.7%	35.0%	35.0%	35.0%	36.0%	37.0%	
Organics Recycling (source separated food to people & livestock)	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	
Mechanical /Hand Sorted @ Res Rec Fac.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Banned Problem Materials + Other recycle	4.2%	4.2%	4.2%	4.2%	6.0%	6.0%	
<b>Percent of Total MSW</b>	56.4%	<b>51.3%</b>	<b>51.3%</b>	<b>51.3%</b>	<b>54.2%</b>	<b>55.7%</b>	
<b>Total MSW Generated</b>	<b>120,000</b>	<b>120,000</b>	<b>120,000</b>	<b>120,000</b>	<b>120,000</b>	<b>120,000</b>	<b>1,201,000</b>
<b>On-Site Disposal - bury, burn barrel, open burn – tons</b>	300	<b>300</b>	<b>300</b>	<b>300</b>	<b>300</b>	<b>300</b>	<b>3,347</b>
<b>Recycling - tons</b>							
Residential	14,900	14,400	14,400	14,400	14,400	15,000	146,000 tons
Commercial/ Industrial/ Institutional - documented	47,790	42,100	42,100	42,100	43,300	44,400	428,900 tons
<b>Organics Recycle</b> (s. separated commercial & residential)	120	100	100	100	200	200	2,000 tons
Mechanical / Hand Sorted @ Res Rec Fac.	-	-	-	-	-	-	- tons
<b>Problem Materials - Banned + Other recycle</b>	5,090	5,100	5,100	5,100	5,100	5,100	51,000 tons
<b>RECYCLING total tons</b>	67,900	<b>61,800</b>	<b>61,800</b>	<b>61,700</b>	<b>63,000</b>	<b>64,700</b>	<b>627,800</b> tons
<b>Resource Recovery -tons tipped</b>							
None	-	-	-	-	-	-	- tons
--	-	-	-	-	-	-	- tons
<b>Total RR Facilities MSW Tipped</b>	-	-	-	-	-	-	- tons
<b>MSW from other Co's sent to a County Res. Rec. Facility</b>	-	-	-	-	-	-	- tons
-	-	-	-	-	-	-	- tons
-	-	-	-	-	-	-	- tons
-	-	-	-	-	-	-	- tons
-	-	-	-	-	-	-	- tons
-	-	-	-	-	-	-	- tons
<b>TOTAL RECEIVED AT RR FACILITY in Co. – tons</b>	-	-	-	-	-	-	-
<b>Landfill - MSW from within the County to LF - tons</b>	52,200	<b>58,300</b>	<b>58,200</b>	<b>58,200</b>	<b>56,800</b>	<b>54,900</b>	<b>570,200</b> tons

**LANDFILL DISPOSAL DESTINATIONS for St. Louis Co's MSW**

St. Louis County Regional Landfill	51,700	57,800	57,700	57,700	56,300	54,400	565,100	tons
Elk River Sanitary Landfill	500	500	500	500	500	500	5,000	tons
	-	-	-	-	-	-	-	tons
	-	-	-	-	-	-	-	tons
<b>Out-of-State Landfills</b>								
--	-	-	-	-	-	-	-	tons
	-	-	-	-	-	-	-	tons
	-	-	-	-	-	-	-	tons
<b>Total All Co's MSW to ALL LF's - tons</b>	<b>52,200</b>	<b>58,300</b>	<b>58,200</b>	<b>58,200</b>	<b>56,800</b>	<b>54,900</b>	<b>570,200</b>	<b>tons</b>
<b>LF Capacity USED + Cover - for ALL Co MSW -cy</b>	<b>69,600</b>	<b>77,700</b>	<b>77,600</b>	<b>77,600</b>	<b>75,700</b>	<b>73,200</b>	<b>760,200</b>	<b>cu yds</b>

**LANDFILL DISPOSAL of Solid Waste at landfills located WITHIN the COUNTY**

St. Louis County Regional Landfill MSW GENERATION to LF	51,700	57,800	57,700	57,700	56,300	54,400	565,100	tons
All MSW Imported to LF in the Co. - tons	300	300	300	300	300	300	3,400	tons
<b>TOTAL MSW to St. Louis County Regional Landfill - tons</b>	<b>52,000</b>	<b>58,100</b>	<b>58,100</b>	<b>58,000</b>	<b>56,600</b>	<b>54,700</b>	<b>568,400</b>	<b>tons</b>
Industrial & non-MSW Waste to MSW LF's in the Co. - tons	16,700	15,500	15,500	15,500	15,500	12,800	152,300	tons
<b>Total Solid Waste to LF within Co. - tons</b>	<b>68,700</b>	<b>73,600</b>	<b>73,600</b>	<b>73,500</b>	<b>72,100</b>	<b>67,500</b>	<b>720,700</b>	<b>tons</b>
<b>LF Capacity USED + cover for ALL Wastes -cu yds</b>	<b>102,600</b>	<b>109,800</b>	<b>109,800</b>	<b>109,700</b>	<b>107,700</b>	<b>100,800</b>	<b>960,900</b>	<b>cu yds</b>
<b>Demolition Debris - received at C&amp;D sites in Co - cy</b>								
C&D Waste - received at C&D sites in Co. - Cu Yds	75360	69200	69300	69500	69800	70500	698,500	cu yds
<b>Yard Waste - received at YW sites in County</b>								
Yard Waste - received at YW sites in Co. - Cu Yds	1250	1250	1250	1250	1250	1250	12,500	cu yds

## LANDFILL CAPACITY USE Data for Landfills Receiving County Solid Wastes

### Ten Year Totals

St. Louis Co MSW to ALL Landfills	<b>570,200</b>	tons
St. Louis Co MSW Capacity Use at ALL Landfills	<b>760,200</b>	cubic yards compacted in-place
St. Louis Co MSW to St. Louis County Regional Landfill	<b>565,100</b>	tons to LF within the County
St. Louis County MSW to Out-of-State Landfills	<b>-</b>	tons
MSW Total to St. Louis County Regional Landfill	<b>720,700</b>	tons to LF in the County
MSW Total to St. Louis County Regional Landfill	<b>757,900</b>	Cubic Yards to LF in the County
Industrial Waste to St. Louis County Regional Landfill	<b>152,300</b>	tons
I Waste Delivered to St. Louis County Regional Landfill	<b>720,700</b>	tons
County Regional Landfill Total USE - All Wastes +Cover - cu yds	<b>960,900</b>	cubic yards compacted in-place

### LF Waste Density Assumptions

Cover Material % - intermediate & Final	<b>12%</b>	
MSW Density =	<b>1,500</b>	lbs/cubic yard in-place
Industrial Waste Density =	<b>1,500</b>	lbs/cubic yard in-place

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10-year Totals
<b>DESTINATION LANDFILLS for St. Louis CO's MSW</b>												
St. Louis County Regional Landfill	51,673	57,755	57,723	57,692	57,534	56,295	56,265	56,235	55,605	55,575	54,408	565,086
Elk River Sanitary Landfill	508	508	508	508	508	508	508	508	508	508	508	5,080
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
<u>Out-of State Landfills</u>												
--	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	0	0	0	0	0	0	0	0
<b>Total All Co's MSW to ALL LF's - tons</b>	<b>52,181</b>	<b>58,263</b>	<b>58,231</b>	<b>58,200</b>	<b>58,042</b>	<b>56,803</b>	<b>56,773</b>	<b>56,743</b>	<b>56,113</b>	<b>56,083</b>	<b>54,916</b>	<b>570,166</b>
<b>County MSW ONLY CAPACITY USE at All Landfills Receiving County Solid Waste - cubic yards compacted In-Place + cover materials = 12%</b>												
<b>LF's Capacity Use -All Wastes +Cover - cu yds</b>	<b>69,600</b>	<b>77,700</b>	<b>77,600</b>	<b>77,600</b>	<b>77,400</b>	<b>75,700</b>	<b>75,700</b>	<b>75,700</b>	<b>74,800</b>	<b>74,800</b>	<b>73,200</b>	<b>760,200</b>

## LANDFILL CAPACITY USE Data for Landfills Receiving County Solid Wastes

### LANDFILL CAPACITY USAGE for Landfills located WITHIN St. Louis County

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10-Year Totals
<b>St. Louis Co's MSW to St. Louis County Regional Landfill -</b>	51,700	57,800	57,700	57,700	57,500	56,300	56,300	56,200	55,600	55,600	54,400	565,100
<b>MSW IMPORTED into St. Louis County Regional Landfill</b>												
<i>Lake County</i>	233	233	233	233	233	233	233	233	232	232	232	2,300
<i>Itasca County</i>	18	18	18	18	18	18	18	18	18	18	18	200
<i>Carlton County/WLSSD</i>	84	84	84	84	85	85	85	85	85	85	85	800
--	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	0	0	0	0	0	-
<b>Other MSW Imported to St. Louis County Regional Landfill</b>	<b>334</b>	<b>335</b>	<b>335</b>	<b>335</b>	<b>336</b>	<b>336</b>	<b>336</b>	<b>336</b>	<b>335</b>	<b>335</b>	<b>335</b>	<b>3,400</b>
<b>MN MSW Received at St. Louis County Regional Landfill -tons</b>	<b>52,000</b>	<b>58,100</b>	<b>58,100</b>	<b>58,000</b>	<b>57,900</b>	<b>56,600</b>	<b>56,600</b>	<b>56,600</b>	<b>55,900</b>	<b>55,900</b>	<b>54,700</b>	<b>568,400</b>
<b>Out-of-State MSW to Landfill in Co. - tons</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total MSW to LF in the County - tons</b>	<b>68,700</b>	<b>73,500</b>	<b>73,500</b>	<b>73,500</b>	<b>73,300</b>	<b>72,100</b>	<b>72,100</b>	<b>72,100</b>	<b>71,500</b>	<b>71,500</b>	<b>67,500</b>	<b>720,700</b>
<b>Industrial &amp; other Non-MSW Waste to LF cells - tons</b>	16,700	<b>15,500</b>	<b>15,600</b>	<b>15,600</b>	<b>12,800</b>	152,300						
<b>Total Solid Waste to St. Louis County Regional Landfill</b>	68,700	73,500	73,500	73,500	73,300	72,100	72,100	72,100	71,500	71,500	67,500	720,700
											Total 10 yr All Waste Tons to SLC-RLF	

### Total Cubic Yard Capacity Use at the St. Louis County Regional Landfill - MSW + Ind. W. + cover

<b>ALL MSW TO St. Louis County Regional Landfill - cu yds</b>	69,300	77,500	77,400	77,400	77,200	75,500	75,500	75,400	74,600	74,500	73,000	MSW to LF CY <b>757,900</b>
<b>Industrial Waste (IW) to SLC-RLF - cu yds</b>	22,200	20,600	20,600	20,600	20,600	20,700	20,700	20,700	20,700	20,700	17,000	<b>203,000</b>
<b>ALL Solid Waste + Cover - <u>Cu Yds In-Place</u></b>	<b>102,600</b>	<b>109,800</b>	<b>109,800</b>	<b>109,700</b>	<b>109,500</b>	<b>107,700</b>	<b>107,700</b>	<b>107,700</b>	<b>106,800</b>	<b>106,700</b>	<b>100,800</b>	<b>960,900</b>
											<b>LANDFILL GRAND TOTAL 10yr Solid Waste Capacity Use - cu yds</b> <b>960,900</b>	
<b>Grand Total LF Capacity Use - cu yds</b>												
<b>Remaining Permitted Landfill Capacity - cy + cover</b>	636,482	526,647	416,860	307,119	197,613	89,883	(17,824)	(125,486)	(232,245)	(338,959)	(439,749)	

## St. Louis County-- Detailed Solid Waste Management System Projections & Calculations

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10-Year Totals
<b>County Population</b>	84,941	84,897	84,854	84,811	84,768	84,724	84,681	84,638	84,595	84,552	84,595	
<b>Number of Households</b>	50,560	50,534	50,508	50,483	50,457	50,431	50,405	50,380	50,354	50,328	50,354	
Number of Persons per Household (St.Demographer data)	1.68											
Annual Population / MSW Change - Demographer Forecast	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	0.05%	
Per Capita MSW generation for On-Site-Disposal (PCA #)	4.00 lbs / person / day (after recycling)											
<b>TOTAL MSW GENERATED</b>	120,459	120,398	120,337	120,276	120,215	120,154	120,093	120,032	119,971	119,910	119,971	1,201,357
<b>Recycling - tons</b>												
<b>Residential</b>	14,945	14,448	14,440	14,433	14,426	14,418	14,411	14,404	14,996	14,989	14,996	145,962
<b>Commercial/Industrial/Institutional</b>	47,791	42,139	42,118	42,097	42,075	43,255	43,233	43,212	43,190	43,168	44,389	428,876
<b>Organics Recyc</b> (source sep. food to people & livestock)	115	120	120	120	240	240	240	240	240	240	240	2,042
<b>Mechanical /Hand Sorted @</b> Res. Recovery Fac	-	-	-	-	-	-	-	-	-	-	-	-
<b>Problem Materials - Banned +Other Recycle</b>	5,085	5,085	5,085	5,085	5,091	5,098	5,100	5,102	5,104	5,106	5,108	50,964
<b>TOTAL MATERIALS RECYCLED:</b>	67,936	61,793	61,764	61,735	61,833	63,012	62,984	62,957	63,530	63,502	64,734	627,844
<b>AVAILABLE MSW for Resource Recovery + Landfill Disposal</b>												
MSW AVAILABLE FOR Resource Rec. + LF	52,181	58,263	58,231	58,200	58,042	56,803	56,773	56,743	56,113	56,083	54,916	570,166



## LANDFILL DISPOSAL

### AVAILABLE St. Louis County MSW for Landfill Disposal Only

County MSW to Send to Landfills	52,181	58,263	58,231	58,200	58,042	56,803	56,773	56,743	56,113	56,083	54,916	570,166
---------------------------------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------

### DESTINATION LANDFILLS for the CO's MSW - tons

St. Louis County Regional Landfill	51,673	57,755	57,723	57,692	57,534	56,295	56,265	56,235	55,605	55,575	54,408	565,086
Elk River Sanitary Landfill	508	508	508	508	508	508	508	508	508	508	508	5,080
	-	-	-	-	-	-	-	-	-	-	-	-
<u>Out-of-State Landfills</u>												
--	-	-	-	-	-	-	-	-	-	-	-	-
--	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total All Co's MSW to ALL LF's - tons</b>	52,181	58,263	58,231	58,200	58,042	56,803	56,773	56,743	56,113	56,083	54,916	<b>570,166</b>
Solid Waste Processing Residue & Unacceptable waste	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total County Solid Waste to Landfill</b>	<b>52,181</b>	<b>58,263</b>	<b>58,231</b>	<b>58,200</b>	<b>58,042</b>	<b>56,803</b>	<b>56,773</b>	<b>56,743</b>	<b>56,113</b>	<b>56,083</b>	<b>54,916</b>	

48.4%

### Landfill CAPACITY USE at All Landfills Receiving County Solid Waste - cubic yards compacted In-Place + cover

LF's Capacity Use including Cover	69,574	77,684	77,642	77,600	77,389	75,737	75,697	75,657	74,817	74,777	73,222	Cu Yds <b>760,222</b>
-----------------------------------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------------------------

### On-Site Disposal - bury, burn barrel, open burning

Population using On-Site Disposal of MSW	470	469	468	467	466	465	460	455	450	445	440	
<b>On-Site Disposal of MSW - tons</b>	<b>343</b>	<b>342</b>	<b>342</b>	<b>341</b>	<b>340</b>	<b>339</b>	<b>336</b>	<b>332</b>	<b>329</b>	<b>325</b>	<b>321</b>	<b>3,347</b>

## PERCENTAGES for the County's SOLID WASTE MANAGEMENT SYSTEM

### On-Site Disposal %

% MSW On-Site Disposal	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
------------------------	------	------	------	------	------	------	------	------	------	------	------	------

### Recycling % - of total waste generated

Residential	12.4%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.5%	12.5%	12.5%
Commercial/Industrial/Institutional	39.7%	35.0%	35.0%	35.0%	35.0%	36.0%	36.0%	36.0%	36.0%	36.0%	37.0%
Organics Recyc (source sep. food to people & livestock)	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Mechanical/Hand Sorted @ Res Rec Fac	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Problem Materials - Banned +Other Recycle	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.3%	4.3%	4.3%	4.3%
<b>% Recycled % of MSW</b>	<b>56.4%</b>	<b>51.3%</b>	<b>51.3%</b>	<b>51.3%</b>	<b>51.4%</b>	<b>52.4%</b>	<b>52.4%</b>	<b>52.5%</b>	<b>53.0%</b>	<b>53.0%</b>	<b>54.0%</b>

2012      2013      2014      2015      2016      2017      2018      2019      2020      2021      2022      10-Year Totals

### Resource Recovery % - excluding mechanical / hand recycling at RR facility

Res Rec % of Co MSW	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
---------------------	------	------	------	------	------	------	------	------	------	------	------

### Landfill % - of County Solid Waste

St. Louis County Regional Landfill	42.9%	48.0%	48.0%	48.0%	47.9%	46.9%	46.9%	46.8%	46.3%	46.3%	45.4%
Elk River Sanitary Landfill	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
	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%	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%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>% County MSW DELIVERED TO LANDFILLS</b>	<b>43.3%</b>	<b>48.4%</b>	<b>48.4%</b>	<b>48.4%</b>	<b>48.3%</b>	<b>47.3%</b>	<b>47.3%</b>	<b>47.3%</b>	<b>46.8%</b>	<b>46.8%</b>	<b>45.8%</b>
<b>% WTE Facility Process Residue</b>	<b>0.0%</b>										

## LANDFILL CAPACITY USE TOTALS - for ALL Solid Waste Received at LF in the Co. -- tons

### TONNAGE VALUES

<b>St. Louis Co MSW to St. Louis County Regional Landfill - tons</b>	51,673	57,755	57,723	57,692	57,534	56,295	56,265	56,235	55,605	55,575	54,408	<b>565,086</b>
MSW Imported to the St. Louis County Regional Landfill - tons												
Lake County	233	233	233	233	233	233	233	233	232	232	232	2,327
Itasca County	18	18	18	18	18	18	18	18	18	18	18	180
Carlton County/WLSSD	84	84	84	84	85	85	85	85	85	85	85	847
--	-	-	-	-	-	-	-	-	-	-	-	-
--	-	-	-	-	-	-	-	-	-	-	-	-
--	-	-	-	-	-	-	-	-	-	-	-	-
Out-of-State MSW Imported to LF in the County	-	-	-	-	-	-	-	-	-	-	-	-
<b>ALL MSW Imported to the LF in the Co. - tons</b>	334	335	335	335	336	336	336	336	335	335	335	<b>3,354</b>
<b>Total MSW Received @ St. Louis County Regional Landfill - tons</b>	52,007	<b>58,090</b>	<b>58,058</b>	<b>58,027</b>	<b>57,870</b>	<b>56,631</b>	<b>56,601</b>	<b>56,570</b>	<b>55,940</b>	<b>55,910</b>	<b>54,743</b>	<b>568,440</b>
Industrial & other Non-MSW Waste to MSW LF in Co -tons	16,674	15,460	15,460	15,460	15,460	15,510	15,525	15,525	15,550	15,550	12,750	152,250
<b>Total SOLID WASTE REC'D @ St. Louis County Regional Landfill</b>	68,681	<b>73,550</b>	<b>73,518</b>	<b>73,487</b>	<b>73,330</b>	<b>72,141</b>	<b>72,126</b>	<b>72,095</b>	<b>71,490</b>	<b>71,460</b>	<b>67,493</b>	<b>720,690</b>
<b>CUBIC YARD CAPACITY USE -- COMPACTED IN-PLACE</b>												
St. Louis Co MSW to St. Louis County Regional Landfill - cu yds	69,342	77,453	77,411	77,369	77,160	75,508	75,467	75,427	74,587	74,547	72,991	757,920
Industrial Waste cy use @ St. Louis County Regional Landfill	22,232	20,613	20,613	20,613	20,613	20,680	20,700	20,700	20,733	20,733	17,000	203,000
<b>MSW + Industrial Solid Waste cy USE</b>	91,574	<b>98,066</b>	<b>98,024</b>	<b>97,982</b>	<b>97,773</b>	<b>96,188</b>	<b>96,167</b>	<b>96,127</b>	<b>95,320</b>	<b>95,280</b>	<b>89,991</b>	<b>960,920</b>
<b>COVER MATERIAL - intermediate &amp; final</b>	10,989	11,768	11,763	11,758	11,733	11,543	11,540	11,535	11,438	11,434	10,799	
<b>TOTAL LF CAPACITY USE - SOLID WASTE + COVER</b>	102,563	109,834	109,787	109,740	109,506	107,730	107,707	107,662	106,759	106,714	100,790	<b>960,920</b>
<b>Remaining PCA Permitted LF Capacity</b>	636,482	<b>526,647</b>	<b>416,860</b>	<b>307,119</b>	<b>197,613</b>	<b>89,883</b>	<b>(17,824)</b>	<b>(125,486)</b>	<b>(232,245)</b>	<b>(338,959)</b>	<b>(439,749)</b>	

## Demolition and Construction Debris Disposal Site Information

St. Louis County Regional Landfill	9,500	4,900	4,900	5,000	5,000	5,100	5,120	5,140	5,160	5,180	5,200	60,200
Itasca County Demolition Landfill	2,915	3,000	3,000	2,500	2,500	2,000	1,800	1,600	1,400	1,200	1,000	22,915
General Waste Demolition Landfill	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	58,300
Waste Management - Canyon Demo/Industrial Waste Landfill	58,410	59,000	59,100	59,200	59,300	59,400	59,520	59,640	59,760	59,880	60,000	653,210
USX Demolition Landfill	2,145	-	-	-	-	-	-	-	-	-	-	2,145
<b>total cy to C&amp;D disposal sites</b>	78,270	72,200	72,300	72,000	72,100	71,800	71,740	71,680	71,620	71,560	71,500	796,770

## Yard Waste - received at YW sites in County

Yard Waste - received at YW sites in Co. - Cu Yds	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	12,500
---	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	--------

# HISTORY DATA -- St. Louis County 2008 to 2012

	2008	2009	2010	2011	2012
<b>TOTAL MSW WASTE GENERATED - excl. yd. waste</b>	<b>122,654</b>	<b>110,549</b>	<b>122,364</b>	<b>115,122</b>	<b>120,459</b>
<i>Percent annual change</i>		<i>-9.9%</i>	<i>10.7%</i>	<i>-5.9%</i>	<i>4.6%</i>
<b>Recycling - includes problem materials &amp; recycle HHW - tons</b>	<b>61,441</b>	<b>55,508</b>	<b>53,204</b>	<b>62,735</b>	<b>67,936</b>
<i>Percent of total MSW to Recycling</i>	<i>50.1%</i>	<i>50.2%</i>	<i>43.5%</i>	<i>54.5%</i>	<i>56.4%</i>
<b>ON-SITE Land Disposal -- farm &amp; at home</b>	<b>200</b>	<b>201</b>	<b>202</b>	<b>203</b>	<b>343</b>
<b>RESOURCE RECOVERY FACILITIES - MSW Tipped</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>LANDFILL DISPOSAL of Co. MSW</b>					
<b>St. Louis County MSW to Landfill -- tons</b>					
St. Louis County Regional Landfill	54,944	51,003	49,787	51,854	51,673
Elk River Sanitary Landfill	925	887	563	533	508
0					0
0					0
<b>MSW Total to Landfills -- tons</b>	<b>55,869</b>	<b>51,890</b>	<b>50,350</b>	<b>52,387</b>	<b>52,181</b>
<b>Co's LF Capacity Use- All MSW + cover cy</b>	<b>74,500</b>	<b>69,200</b>	<b>67,100</b>	<b>69,800</b>	<b>70,000</b>

St. Louis County  
Solid Waste Management Plan  
2013

**Appendix B  
Budget**

St. Louis County Environmental Services 10 Year Solid Waste Budget												
<b>Expenses</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
Landfill <sup>1</sup>	\$ 1,601,907	\$ 704,743	\$ 701,038	\$ 3,227,459	\$ 1,884,008	\$ 700,688	\$ 837,502	\$ 2,734,452	\$ 601,541	\$ 778,772	\$ 886,147	\$ 14,658,257
Waste Transfer <sup>2</sup>	\$ 755,578	\$ 770,689	\$ 786,103	\$ 801,825	\$ 817,861	\$ 834,219	\$ 850,903	\$ 867,921	\$ 885,280	\$ 902,985	\$ 921,045	\$ 9,194,409
Processing	\$ 25,469	\$ 25,978	\$ 26,498	\$ 27,028	\$ 27,568	\$ 28,120	\$ 28,682	\$ 29,256	\$ 29,841	\$ 30,438	\$ 31,047	\$ 383,375
Demolition Material <sup>3</sup>	\$ 328,406	\$ 336,014	\$ 343,290	\$ 352,836	\$ 362,453	\$ 372,142	\$ 383,905	\$ 398,743	\$ 408,658	\$ 418,651	\$ 428,724	\$ 4,133,823
Special Wastes <sup>3</sup>	\$ 38,000	\$ 45,760	\$ 39,535	\$ 60,326	\$ 41,132	\$ 41,955	\$ 42,794	\$ 43,650	\$ 44,523	\$ 45,414	\$ 46,322	\$ 489,411
HHW <sup>3</sup>	\$ 72,000	\$ 73,440	\$ 136,403	\$ 76,407	\$ 77,935	\$ 79,494	\$ 81,084	\$ 82,706	\$ 84,360	\$ 86,047	\$ 87,768	\$ 937,644
Recycling <sup>3</sup>	\$ 740,200	\$ 713,404	\$ 939,372	\$ 741,410	\$ 766,238	\$ 771,362	\$ 786,790	\$ 802,526	\$ 853,576	\$ 834,948	\$ 851,646	\$ 8,801,471
Administration <sup>4</sup>	\$ 4,281,243	\$ 4,684,100	\$ 4,671,338	\$ 3,503,656	\$ 4,394,823	\$ 4,978,041	\$ 4,973,871	\$ 4,265,553	\$ 5,366,512	\$ 5,339,180	\$ 5,505,831	\$ 51,964,149
<b>Total Expenses</b>	<b>\$ 7,842,803</b>	<b>\$ 7,354,129</b>	<b>\$ 7,643,578</b>	<b>\$ 8,790,947</b>	<b>\$ 8,372,019</b>	<b>\$ 7,806,021</b>	<b>\$ 7,985,531</b>	<b>\$ 9,224,806</b>	<b>\$ 8,274,290</b>	<b>\$ 8,436,434</b>	<b>\$ 8,758,530</b>	<b>\$ 90,489,089</b>
<b>Revenue</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
Tipping Fees	\$ 2,524,054	\$ 2,582,611	\$ 2,865,140	\$ 2,988,045	\$ 3,114,840	\$ 3,245,644	\$ 3,370,180	\$ 3,498,974	\$ 3,632,158	\$ 3,704,132	\$ 3,777,762	\$ 35,303,540
Services Fees	\$ 2,459,007	\$ 2,471,389	\$ 2,483,834	\$ 2,496,344	\$ 2,508,918	\$ 2,521,557	\$ 2,534,261	\$ 2,547,030	\$ 2,559,865	\$ 2,572,766	\$ 2,585,734	\$ 27,740,703
Recycling Revenue	\$ 510,000	\$ 520,200	\$ 530,604	\$ 541,216	\$ 552,040	\$ 563,081	\$ 574,343	\$ 585,830	\$ 597,546	\$ 609,497	\$ 621,687	\$ 6,206,045
Special Waste Revenue	\$ 20,808	\$ 21,224	\$ 21,649	\$ 22,082	\$ 22,523	\$ 22,974	\$ 23,433	\$ 23,902	\$ 24,380	\$ 24,867	\$ 25,365	\$ 253,207
Grant funding and stipends	\$ 502,000	\$ 502,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 497,000	\$ 5,477,000
Licensing	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 9,225	\$ 101,475
Other	\$ 180,993	\$ 167,458	\$ 159,504	\$ 151,598	\$ 133,618	\$ 121,168	\$ 115,819	\$ 110,126	\$ 93,314	\$ 87,437	\$ 80,869	\$ 1,401,902
Fund balance contribution	\$ 1,636,717	\$ 1,080,023	\$ 1,076,622	\$ 2,085,437	\$ 1,533,854	\$ 825,372	\$ 861,271	\$ 1,952,720	\$ 860,802	\$ 931,510	\$ 1,160,889	\$ 14,005,217
<b>Total Revenue</b>	<b>\$ 7,842,803</b>	<b>\$ 7,354,129</b>	<b>\$ 7,643,578</b>	<b>\$ 8,790,947</b>	<b>\$ 8,372,019</b>	<b>\$ 7,806,021</b>	<b>\$ 7,985,531</b>	<b>\$ 9,224,806</b>	<b>\$ 8,274,290</b>	<b>\$ 8,436,434</b>	<b>\$ 8,758,530</b>	<b>\$ 90,489,088</b>
<b>Per Capita</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
Expenses	\$ 92	\$ 87	\$ 90	\$ 104	\$ 99	\$ 92	\$ 94	\$ 109	\$ 98	\$ 100	\$ 103	\$ 1,068
Revenue	\$ 92	\$ 87	\$ 90	\$ 104	\$ 99	\$ 92	\$ 94	\$ 109	\$ 98	\$ 100	\$ 103	\$ 1,068
Net	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Per Household</b>	<b>2,013</b>	<b>2,014</b>	<b>2,015</b>	<b>2,016</b>	<b>2,017</b>	<b>2,018</b>	<b>2,019</b>	<b>2,020</b>	<b>2,021</b>	<b>2,022</b>	<b>2,023</b>	<b>TOTAL</b>
Expenses	\$ 155	\$ 146	\$ 151	\$ 174	\$ 166	\$ 155	\$ 158	\$ 183	\$ 164	\$ 167	\$ 174	\$ 1,794
Revenue	\$ 155	\$ 146	\$ 151	\$ 174	\$ 166	\$ 155	\$ 158	\$ 183	\$ 164	\$ 167	\$ 174	\$ 1,794
Net	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1. includes operations, financial assurance, development, engineering and construction costs, leachate systems												
2. includes transfer station and canister site capital expenses and operations												
3. includes capital and program expenses												
4. includes staff and other expenses												

## Appendix C Facility Services and Hours of Operation

**St. Louis County Solid Waste Facilities and Services**  
 All sites are closed on **New Years Day, Memorial Day, July 4th, Labor Day, Thanksgiving and Christmas Day**  
 1-800-450-9278 or 218-749-9703  
 307 First Street South, Suite 115, Virginia, MN 55792  
 Office Hours 8:00am to 4:30pm Monday through Friday.

As of 12/01/2012	Site/Location	Phone	Hours		Artifreeze	Appliances—2/trip	Auto Batteries	Brush	Demolition	4 ft. tires and CRT's - 6/trip	Household Hazardous wastes	Mattresses/Box Springs	Motor Oil	Drained Oil Filters—6/trip	Scrap Metal	Tires—4/trip	Tires and computer monitors	Mixed Paper	Mixed cans and bottles	Cardboard	Yard Waste
			Summer Hours April 15—Sept. 30	Winter Hours Oct. 1—April 14																	
	Ash River Trail Canister Site 11391 Ash River Trail, Orr	374-3077	W: 1 pm - 4 pm Sa: 2:30 pm -5:30 pm	Sa: 12:30 pm -4:30pm	X					X	X	X	X	X	X	X	X	X	X	X	X
	Aurora Transfer Station 5910 Hwy 135 N., Aurora	229-3479	M, Th, F: 8 am -4 pm Tu, W: 10 am - 4 pm Sa: 8 am - Noon		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Balkan Twnp Canister Site 11489 Vlasich Road, Chisholm	254-3967	M, W, Sa: 8 am - 4 pm		X	X				X	X	X	X	X	X	X	X	X	X	X	X
	Brookston Transfer Station 8609 Highway 2, Brookston	453-5692	M, Tu, Th, Sa: 8 am - 4:30 pm		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Comstock Lake Canister 4649 Comstock Lake Rd, Makinen	1-800-450-9278	Su: 11 am - 4 pm							X	X	X				X	X	X	X	X	X
	Cook Transfer Station 2134 S. Beatty Rd	666-2336	M: 10 am - 6 pm Tu thru Sa: 9 am - 3:30 pm		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Cotton Canister Site 8476 Hwy 53	482-3606	Su, F: 11 am - 6 pm	Su, F: 10 am - 4 pm	X	X				X	X	X	X	X	X	X	X	X	X	X	X
	County 77 Canister Site 2038 Co. Rd. 77, Tower	753-8074	Tu: 1 pm - 6 pm Th: 8 am - 1 pm Sa: 8 am - 5 pm Su: Noon - 6 pm	Th, Su: Noon - 5 pm				X	X	X	X	X	X	X	X	X					X
	Dewey Lake Canister Site 6315 Dewey Lake Rd, Chisholm	254-7912	Su: 1 pm - 7 pm							X	X	X	X	X	X	X	X	X	X	X	X
	Embarrass Canister Site 7530 Koski Rd	984-3641	Th: 10 am - 5 pm Sa: 12:30 pm - 4:30 pm							X	X	X	X	X	X	X			X	X	
	Floodwood "Sit" Sites	1-800-450-9278	Call for locations and hours							X	X										
	French Canister Site 7150 Greenrock Road, Side Lake	254-1342	W, Sa, Su: 8 am - 4 pm			X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Great Scott North Canister 7075 Hwy 25, Britt	258-8934	Th, Su: 2 pm - 6 pm	Su: 1 pm - 5 pm						X	X	X	X	X	X			X	X		
	Great Scott South Canister 9619 Bonner Rd., Mt. Iron	258-4276	Tu: Noon - 6 pm	Tu: Noon - 5 pm						X	X	X						X	X		
	Hibbing Transfer Station 3994 Landfill Road	262-6488	M - F: 8 am - 4:30 pm Sa: 8 am - 3:30 pm		X	X	X	X	X	X	X	X	X	X	X	X	X				
	Household Hazardous Waste At Regional Landfill, Virginia	741-8831	Tu, Sa: 8 am - 1 pm							X	X										
	Household Hazardous Waste At Hibbing Transfer Station	362-5922	Sa: 8 am - 1 pm							X	X										
	Kabetogama Lk Canister 10150 Gamma Rd, Ray	875-2093	M, W: 9 am - Noon Sa: 10:30 am -1:30pm	W: Noon - 4 pm Sa: 8 am - Noon						X	X	X	X	X	X			X	X	X	
	Lavell Canister Site 3175 Hwy 25, Hibbing	262-6294	M, W, Sa: 8 am - 5 pm		X	X				X	X	X	X	X	X	X	X	X	X	X	X
	Makinen Canister Site 6327 Long Lake Rd	744-7577	Tu, Su: Noon - 5 pm			X				X	X	X	X	X	X	X	X	X	X	X	
	Meadowlands Canister Site 7722 Pine Rd	427-2106	Th, Sa: 9 am - 3 pm			X		X		X	X	X	X	X	X	X	X	X	X	X	
	Northwoods Trans Station 9384 Hwy 21 N, Ely	365-3895	M, Th, F, Sa: 8am - 3pm Tu: 9:30 am - 3 pm W: Noon - 6 pm	M, Th, F, Sa: 8 am - 3 pm Tu: 9:30 am - 3 pm W: 11am - 5 pm	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Orr Canister Site 4038 Hwy 53	757-3115	Tu: 9 am - 1 pm Th: 2 pm - 7 pm Sa: 8 am - Noon Su: 10 am - 2 pm	Tu, Th: 9 am - Noon Sa: 8 am - Noon		X				X	X	X	X	X	X	X	X	X	X	X	
	Portage Canister Site 6992 Crane Lake Rd, Buyck	993-8871	M, Tu: 2 pm - 6 pm Th: 10 am - 1 pm Su: 3 pm - 6 pm	Tu, Sa: 1 pm - 4:30 pm		X				X	X	X	X	X	X	X	X	X	X	X	
	Prairie Lake "Sit" Site Hwy 73 & Co. Rd. 86	1-800-450-9278	Tu: 5:30 pm - 6:30 pm								X	X									
	Regional Landfill 5341 Regional Landfill Road, Virginia	741-8207	M - F: 8 am - 4:30 pm Sa: 8 am - 3:30 pm		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Soudan Canister Site 5160 Hwy 169	753-6052	Su, M, W, Sa: 8 am - 5 pm		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Sturgeon Canister Site 8380 Hwy 73, Angora	254-7986	Su: 10 am - 4 pm							X	X	X							X	X	

Indicates free  
≡ Tires up to 24" are free. Others accepted at current fees.

X Doors must be removed from refrigerators and freezers.

# Facility Services and Hours of Operation (Cont)

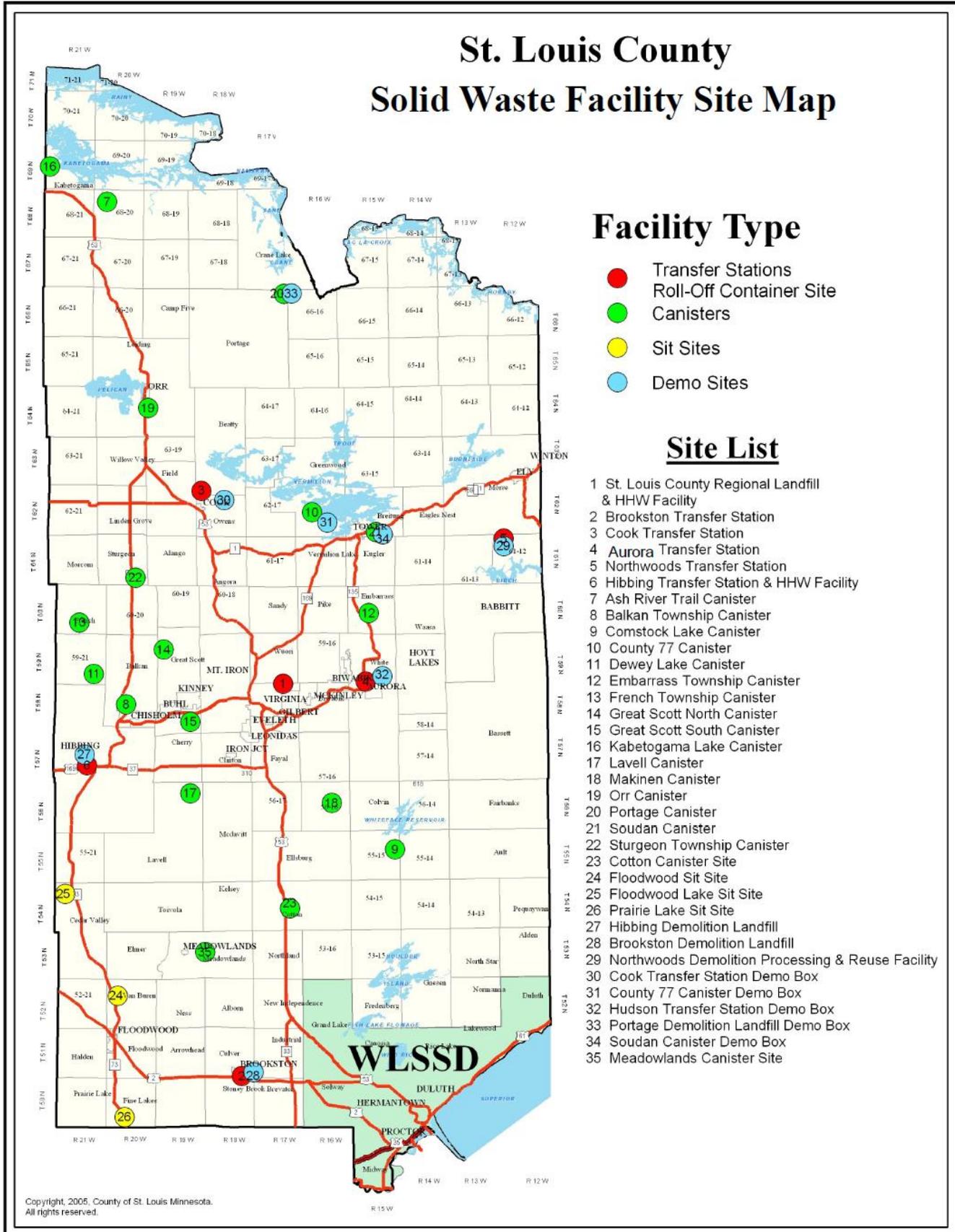
## St. Louis County Solid Waste Facility Site Map

### Facility Type

- Transfer Stations
- Roll-Off Container Site
- Canisters
- Sit Sites
- Demo Sites

### Site List

- 1 St. Louis County Regional Landfill & HHW Facility
- 2 Brookston Transfer Station
- 3 Cook Transfer Station
- 4 Aurora Transfer Station
- 5 Northwoods Transfer Station
- 6 Hibbing Transfer Station & HHW Facility
- 7 Ash River Trail Canister
- 8 Balkan Township Canister
- 9 Comstock Lake Canister
- 10 County 77 Canister
- 11 Dewey Lake Canister
- 12 Embarrass Township Canister
- 13 French Township Canister
- 14 Great Scott North Canister
- 15 Great Scott South Canister
- 16 Kabetogama Lake Canister
- 17 Lavell Canister
- 18 Makinen Canister
- 19 Orr Canister
- 20 Portage Canister
- 21 Soudan Canister
- 22 Sturgeon Township Canister
- 23 Cotton Canister Site
- 24 Floodwood Sit Site
- 25 Floodwood Lake Sit Site
- 26 Prairie Lake Sit Site
- 27 Hibbing Demolition Landfill
- 28 Brookston Demolition Landfill
- 29 Northwoods Demolition Processing & Reuse Facility
- 30 Cook Transfer Station Demo Box
- 31 County 77 Canister Demo Box
- 32 Hudson Transfer Station Demo Box
- 33 Portage Demolition Landfill Demo Box
- 34 Soudan Canister Demo Box
- 35 Meadowslands Canister Site



Copyright, 2005, County of St. Louis Minnesota. All rights reserved.

# Appendix D Tipping Fees



## ST. LOUIS COUNTY ENVIRONMENTAL SERVICES DEPARTMENT 2012 SOLID WASTE TIPPING FEES

<sup>1</sup>Solid Waste Management Area (SWMA) Rates (Effective 1/1/12)

For more information, call the Environmental Services Department at 1-800-450-9278 or 1-218-749-9703

Waste Code	<sup>2</sup> 2012 Fees	Units	Description	<sup>5</sup> Non MSW Tax Demo LF	SWM Tax MSW LF 17%	Total Cost w/state tax & city surcharge
001	\$0.85½	per bag/can	MSW (1-6 bags; per 32 gal bag)		.14½/bag	\$1.00/bag
002	\$39.00	per ton	<sup>3</sup> MSW		\$6.63/ton	\$45.63/ton
004	\$4.27	per yd <sup>3</sup>	<sup>3</sup> MSW - loose waste		0.73/yd <sup>3</sup>	\$5.00/yd <sup>3</sup>
005	\$11.71	per yd <sup>3</sup>	<sup>4</sup> MSW - compacted waste		\$1.99/yd <sup>3</sup>	\$13.70/yd <sup>3</sup>
006	\$36.00	per ton	Demolition (to demo LF)	\$2.00/ton		\$39.67/ton
008	\$12.40	per yd <sup>3</sup>	Demolition (to demo LF)	\$0.60/yd <sup>3</sup>		\$13.50/yd <sup>3</sup>
009	\$30.00	per ton	Municipal Utility Ash (0-7500 tons per customer)		\$5.70/ton	\$35.70/ton
119	\$30.00	per yd <sup>3</sup>	Municipal Utility Ash (0-7500 yd <sup>3</sup> per customer)		\$5.70/yd <sup>3</sup>	\$35.70/yd <sup>3</sup>
109	\$40.00	per ton	Municipal Utility Ash (more than 7500 tons per customer)		\$6.80/ton	\$46.80/ton
129	\$40.00	per yd <sup>3</sup>	Municipal Utility Ash (more than 7500 yd <sup>3</sup> per customer)		\$6.80/yd <sup>3</sup>	\$46.80/yd <sup>3</sup>
010	\$0.00	per unit	Appliances (limit 2 per load - vouchers needed for more than 2)			\$0.00/ea
011	\$8.00	per unit	Appliances (in excess of 2 per load without voucher)			\$8.00/ea
012	\$0.00	per unit	Tires up to 16" (4 per load with or without rims - non-commercial generated only)			\$0.00/ea
014	\$0.00	per unit	Tires 16" to 24" (4 per load with or without rims - non-commercial generated only)			\$0.00/ea
016	\$1.00	per unit	Tires up to 16" (in excess of 4 per load with or without rims)			\$1.00/ea
018	\$6.00	per unit	Tires 16" to 24" (in excess of 4 per load with or without rims)			\$6.00/ea
121	\$110.00	per ton	Tires up to 24" (in excess of 10 per load with or without rims)			\$110.00/ton
033	\$165.00	per ton	Off-road tires up to 600# ea (max 6 tires per year)			\$165.00/ton
020	\$0.00	per unit	Yard Waste (leaves, grass clippings, garden waste, etc)			\$0.00/ea
021	\$0.00	per ton	Brush, Branches, Trees			\$0.00/ton
022	\$0.00	per yd <sup>3</sup>	Brush, Branches, Trees			\$0.00/yd <sup>3</sup>
023	\$0.00	per unit	Automobile Batteries			\$0.00/ea
024	\$0.00	per gallon	Used Motor Oil			\$0.00/gal
025	\$0.00	per ton	Scrap Metal			\$0.00/ton
062	\$0.00	per gallon	Used Antifreeze			\$0.00/gal
078	\$0.85½	per bag	Light Industrial Waste ( per 32 gal bag)		\$0.14½/bag	\$1.00/bag
026	\$39.00	per ton	Industrial Waste (mixed)		\$6.63/ton	\$45.63/ton
076	\$22.50	per yd <sup>3</sup>	<sup>5</sup> Industrial Waste (mixed)		\$3.83/yd <sup>3</sup>	\$26.33/yd <sup>3</sup>
027	\$22.00	per ton	Heavy Industrial Waste (casting sand, etc)		\$3.74/ton	\$25.74/ton
077	\$22.00	per yd <sup>3</sup>	<sup>5</sup> Heavy Industrial Waste (casting sand, etc)		\$3.74/yd <sup>3</sup>	\$25.74/yd <sup>3</sup>
039	\$12.50	per ton	Beneficial Use Material			\$12.50/ton
028	\$62.00	per yd <sup>3</sup>	Asbestos		\$10.54/yd <sup>3</sup>	\$72.54/yd <sup>3</sup>
034	\$0.00	per unit	Fluorescent Bulbs (4' tubes or CFL only - limit 6 per load - residential only)			\$0.00/ea
035	\$.50	per unit	Fluorescent Bulbs (4' tubes or CFL in excess of 6 per load from residential sources only) (and for all tubes from commercial sources)			\$.50/ea
036	\$0.00	per unit	Automobile Oil Filters (limit 6 per load)			\$0.00/ea
037	\$1.00	per unit	Automobile Oil Filters (in excess of 6 per load)			\$1.00/ea
030	\$8.00	per unit	Mattresses/Box Springs			\$8.00/ea
031	\$250.00	per ton	Mattresses/Box Springs			\$250.00/ton
110	\$1.00	per unit	*Video Display Device 19" or less (monitors, TV's, laptops)			\$1.00/ea
111	\$2.00	per unit	*Video Display Device over 19" (monitors, TV's, laptops)			\$2.00/ea
116	\$75.00	per hour	Labor for Removal of unacceptable and restricted wastes from load			\$75.00/hr
122	\$22.00	per ton	Petroleum Contaminated Soil		\$3.74/ton	\$25.74/ton

\*\* Minimum \$5.00 charge for use of scale at Regional Landfill and Transfer Stations

<sup>1</sup> SWMA tipping fee rates apply to all waste generated in St. Louis County except that portion of the County served by the Western Lake Superior Sanitary District (WLSDD).

<sup>2</sup> Tipping fees must be paid by personal or business check, solid waste coupon, pre-paid card, Visa, Mastercard, or Discover.

<sup>3</sup> MSW commingled in the same load with demolition will be charged at the higher tipping fee rate (\$39.00/ton or \$12.40 cu yd).

<sup>4</sup> This waste category will be used only when the weigh scale is inoperative.

<sup>5</sup> The SWM Tax Demo LF is charged for all demolition material delivered to all weigh scale sites and the Portage, County 77, French, and Soudan Canister Sites.

# Appendix D

## Tipping Fees (Cont)



### ST. LOUIS COUNTY ENVIRONMENTAL SERVICES DEPARTMENT 2012 SOLID WASTE TIPPING FEES

<sup>1</sup>Out of Solid Waste Management Area (SWMA) Rates (Effective 1/01/12)

For more information, call the Environmental Services Department at 1-800-450-9278 or 1-218-749-9703

Waste Code	<sup>2</sup> 2012 Fees	Units	Description	<sup>5</sup> Non MSW Tax Demo LF	SWM Tax MSW LF 17%	Total Cost w/ state tax & city surcharge
040	\$1.71	per bag/can	MSW (1-6 bags; per 32 gal bag)		0.29/bag	\$2.37/bag
041	\$70.09	per ton	<sup>3</sup> MSW		\$11.92/ton	\$106.99/ton
042	\$8.55	per yd <sup>3</sup>	<sup>3</sup> MSW - loose waste		\$1.45/yd <sup>3</sup>	\$12.50/yd <sup>3</sup>
043	\$24.79	per yd <sup>3</sup>	<sup>4</sup> MSW - compacted waste		\$4.21/yd <sup>3</sup>	\$36.50/yd <sup>3</sup>
044	\$50.00	per ton	Demolition	\$2.00/ton		\$53.67/ton
045	\$18.40	per yd <sup>3</sup>	Demolition	\$0.60/yd <sup>3</sup>		\$19.50/yd <sup>3</sup>
046	\$8.00	per unit	Appliances			\$8.00/ea
079	\$40.00	per ton	Municipal Utility Ash (0-7500 tons per customer)		\$6.80/ton	\$71.78/ton
139	\$40.00	per yd <sup>3</sup>	Municipal Utility Ash (0-7500 yd <sup>3</sup> per customer)		\$6.80/yd <sup>3</sup>	\$54.30/yd <sup>3</sup>
179	\$50.00	per ton	Municipal Utility Ash (more than 7500 tons per customer)		\$8.50/ton	\$83.48/ton
149	\$50.00	per yd <sup>3</sup>	Municipal Utility Ash (more than 7500 yd <sup>3</sup> per customer)		\$8.50/yd <sup>3</sup>	\$66.00/yd <sup>3</sup>
047	\$2.00	per unit	Tires up to 16" (with or without rims)			\$2.00/ea
049	\$10.00	per unit	Tires 16" to 24" (with or without rims)			\$10.00/ea
061	\$247.50	per ton	Off-road tires up to 600# ea (max 6 tires per year)			\$247.50/ton
051	\$0.00	per unit	Yard Waste (leaves, grass clippings, garden waste, etc)			\$0.00/ea
052	\$30.00	per ton	Brush, Branches, Trees			\$30.00/ton
053	\$7.00	per yd <sup>3</sup>	Brush, Branches, Trees			\$7.00/yd <sup>3</sup>
054	\$0.00	per unit	Automobile Batteries			\$0.00/ea
055	\$0.00	per gallon	Used Motor Oil			\$0.00/gal
056	\$0.00	per ton	Scrap Metal			\$0.00/ton
057	\$82.50	per ton	Industrial Waste (mixed)		\$14.03/ton	\$96.53/ton
063	\$41.25	per yd <sup>3</sup>	<sup>5</sup> Industrial Waste (mixed)		\$7.01/yd <sup>3</sup>	\$48.26/yd <sup>3</sup>
058	\$32.00	per ton	Heavy Industrial Waste (casting sand, etc)		\$5.44/ton	\$37.44/ton
064	\$32.00	per yd <sup>3</sup>	<sup>5</sup> Heavy Industrial Waste (casting sand, etc)		\$5.44/yd <sup>3</sup>	\$37.44/yd <sup>3</sup>
059	\$93.00	per yd <sup>3</sup>	Asbestos		\$15.81/yd <sup>3</sup>	\$108.81/yd <sup>3</sup>
065	\$1.00	per unit	Fluorescent Bulbs (4' and CFL residential only)			\$1.00/ea
067	\$1.00	per unit	Automobile Oil Filters			\$1.00/ea
140	\$16.00	per unit	Mattresses/Box Springs			\$16.00/ea
141	\$500.00	per ton	Mattresses/Box Springs			\$500.00/ton
112	\$5.00	per unit	Video Display Device 19" or less (monitors, TV's, laptops)			\$5.00/ea
113	\$10.00	per unit	Video Display Device over 19" (monitors, TV's, laptops)			\$10.00/ea
116	\$75.00	per hour	Labor for Removal of unacceptable and restricted wastes from load			\$75.00/hr
123	\$32.00	per ton	Petroleum Contaminated Soil		\$5.44/ton	\$62.42/ton

**\*\* Minimum \$5.00 charge for use of scale at Regional Landfill and Transfer Stations.**

<sup>1</sup> Out-of-SWMA solid waste is generated in another county, Western Lake Superior Sanitary District, or other areas not under the jurisdiction of the St. Louis County Environmental Services Department. Out-of-SWMA residents are required to pay a higher tipping fee than SWMA residents because these individuals do not pay the solid waste operations fee charged to St. Louis County Solid Waste Management Area residents and businesses. There will be no free disposal for out-of-county appliances, fluorescent bulbs, oil filters, or tires. MSW generated by tourists and seasonal residents in the SWMA is not out-of-SWMA waste.

<sup>2</sup> Tipping fees must be paid by personal or business check, solid waste coupon, pre-paid card, Visa, Mastercard, or Discover.

<sup>3</sup> MSW commingled in the same load with demolition will be charged at the higher tipping fee rate (\$70.09/ton or \$18.40 cu yd).

<sup>4</sup> This waste category will be used only when the weigh scale is inoperative.

<sup>5</sup> The SWM Tax Demo LF is charged for all demolition material delivered to all weigh scale sites and the Portage, County 77, French, and Soudan Canister Sites.

**Appendix E**  
**Solid Waste Ordinance 45**

**St. Louis County**  
**Solid Waste Ordinance No. 45**

Adopted: December 22, 1992

Revised: January 1, 1993

February 1, 1994

February 14, 1995

May 22, 2001

March 26, 2002

August 1, 2008

TABLE OF CONTENTS

**ARTICLE I**     **TITLE** ..... 3

**ARTICLE II**     **REPEAL OF PRIOR REGULATIONS** ..... 3

**ARTICLE III**    **STATEMENT OF PURPOSE, SCOPE AND AUTHORITY** ..... 3

**ARTICLE IV**     **DEFINITIONS** ..... 4

**ARTICLE V**     **ADMINISTRATION OF ORDINANCE** ..... 15

**ARTICLE VI**     **UNLAWFUL ACTIVITIES** ..... 16

    Section 1     Improper Transportation ..... 16

    Section 2     Upsetting of Containers Prohibited ..... 16

    Section 3     Using Containers of Another Prohibited ..... 16

    Section 4     Containment of Solid Waste and Recyclable Materials ..... 17

    Section 5     Improper Disposal ..... 17

    Section 6     Storage of Waste ..... 18

    Section 7     Duty to Provide Collection, Transportation and Disposal of Solid Waste ..... 18

    Section 8     Items Prohibited For Collection Or Placement With Mixed Municipal Solid Waste ..... 19

    Section 9     Scavenging ..... 19

    Section 10    Spills ..... 20

**ARTICLE VII**    **LICENSING PROVISIONS** ..... 21

    Section 1     General Licensing Provisions ..... 21

    Section 2     Hauler Collection or Transportation licenses ..... 24

    Section 3     Waste Management Facility Licenses ..... 28

**ARTICLE VIII SOLID WASTE MANAGEMENT FEES ..... 35**

    Section 1     Establishment of Charges ..... 35

    Section 2     Charging Methods ..... 36

    Section 3     Billing and Collection ..... 37

    Section 4     Fee Appeals ..... 39

**ARTICLE IX     ENFORCEMENT OF ORDINANCE PROVISIONS ..... 40**

    Section 1     Inspections ..... 40

    Section 2     Re-inspections ..... 42

    Section 3     Action Authorized ..... 42

    Section 4     Hearings ..... 54

**ARTICLE X     ADDITIONAL REQUIREMENTS AND PROVISIONS ..... 58**

    Section 1     Waivers or Modifications ..... 58

    Section 2     Agency Approval ..... 58

    Section 3     Planning and Zoning Approval ..... 59

    Section 4     Promotion of Public Health, Safety, and Welfare ..... 59

    Section 5     Indemnification ..... 59

    Section 6     No Consent ..... 59

    Section 7     Severability ..... 60

    Section 8     Effectuation ..... 61

**ARTICLE I TITLE**

Solid Waste Ordinance for St. Louis County, Minnesota, otherwise known as Ordinance Number 45.

**ARTICLE II REPEAL OF PRIOR REGULATIONS**

Ordinance Number 8, Solid Waste Ordinance of St. Louis County, and Ordinance 32A, An Ordinance Creating Service Charges For Solid Waste Management Services Provided By St. Louis County Or Others Under Contract With St. Louis County, and any amendments thereto, are hereby repealed.

**ARTICLE III STATEMENT OF PURPOSE, SCOPE AND AUTHORITY**

The purpose of this Ordinance is to protect the health, welfare and safety of the public and to protect the environment of St. Louis County pursuant to Minnesota Statutes, Chapters 115A and 400, by establishing standards for regulating Solid Waste Management; providing for application, license and surcharge procedures; establishing fees and service charges; and providing penalties for lack of compliance with these provisions.

The policy of St. Louis County is to provide for the management of Solid Waste in a manner which will protect the health, welfare and safety of the public, prevent the spread of disease, prevent the creation of nuisances, conserve natural resources, and maintain the beauty and quality of the environment. It is also the policy of St. Louis County to conform with the purposes outlined in Minnesota Statutes §115A.02

**ARTICLE IV DEFINITIONS**

For the purpose of this Ordinance, capitalized words have the following definitions.

The singular number includes the plural and the plural includes the singular.

**Attorney:** The County Attorney of St. Louis County, Minnesota, or authorized representative.

**Auditor:** The County Auditor of St. Louis County, Minnesota, or authorized representative.

**Certificate of Need (CON):** an issuance from the State of Minnesota to certify needed Municipal Solid Waste Disposal capacity.(Minn. Stat. §115A.917.)

**City:** a statutory and home rule charter city or town located within the County. (Minn. Stat. §115A.03.)

**Collection:** 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 Solid Waste Facility.

**Construction Debris:** waste building materials, packaging, and rubble resulting from construction, remodeling, repair and demolition of buildings and roads.

**County:** the County of St. Louis, Minnesota, including any Department or representative of St. Louis County who is authorized by this Ordinance or otherwise by the County Board to represent St. Louis County in the enforcement or administration of this Ordinance.

**County Board:** the Board of Commissioners of St. Louis County, Minnesota

**Demolition Debris:** Solid Waste resulting from the demolition of buildings, roads, and other structures including concrete, brick, bituminous concrete, untreated wood, masonry, glass, trees, rock, and plastic building parts. Demolition Debris does not include asbestos wastes.

**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 waters, including ground waters.

**Disposal Facility:** a waste facility permitted by the Minnesota Pollution Control Agency that is designed or operated for the purpose of disposing of waste on or in the land, together with any appurtenant facilities needed to process waste for disposal or transfer to another waste facility.

**Dumping:** the illegal placement of any Solid Waste, including Demolition Debris, hazardous waste, Industrial Waste, mixed Solid Waste, or Recyclable Materials, anywhere other than an approved container or a Waste Facility during hours of operation, or in a manner that does not protect the environment, is susceptible to open burning, and is exposed to the elements, flies, rodents, and scavengers.

**Energy Recovery Facility:** a facility used to capture the heat value of solid waste for conversion to steam, electricity, or immediate heat by direct combustion or by first converting it into an intermediate fuel product.

**Environmental Services Department or Department:** the St. Louis County Environmental Services Department.

**Environmental Services Director:** the individual assigned by the County to oversee and direct the activities of the Solid Waste Program.

**Facility:** See Waste Facility

**Generation:** the act or process of producing Solid Waste.

**Generator:** any Person generating Solid Waste.

**Hauler:** any Person collecting or transporting Solid Waste or Recyclable Material, not including a Self-Hauler.

**Hazardous Waste:** any Refuse, sludge, or other waste material or combinations of Refuse, sludge or other waste materials in solid, semisolid, liquid, or contained gaseous form which because of its 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 incapacitating 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. Hazardous waste shall also include all materials designated as hazardous and regulated by State or Federal laws.

**Household:** a single detached dwelling unit or a single unit of a Multiple Dwelling Unit and appurtenant structures.

**Household Hazardous Waste:** 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, or non-profit activities that is Generated, stored, or present in a household.

**Industrial Waste:** all Solid Waste generated from an industrial, manufacturing, process, and solid waste

generated from nonmanufacturing activities such as service, and commercial establishments. Industrial solid waste does not include office materials, restaurant and food preparation waste, discarded machinery, demolition debris, municipal solid waste combustor ash, or household refuse.

**Infectious Waste:** Waste originating from the diagnosis, care, or treatment of a person or animal that has been or may have been exposed to a contagious or infectious disease. Unless the materials have been rendered noninfectious by procedures approved the state commissioner of health, infectious waste includes:  
a.) all waste originating from persons or animals placed in isolation for control and treatment of an infectious disease; b.) bandages, dressings, casts, catheters, tubing, and similar disposable items which have been in contact with wounds, burns, anatomical tracts, or surgical incisions, and which are suspect of being or have been medically verified as infectious; c.) all infectious anatomical waste, including human and animal parts or tissues; d.) infectious sharps and needles; e.) laboratory and pathology waste of an infectious nature; or f.) any other waste, as defined by the state commissioner of health, which, because of its infectious nature requires handling and disposal in a manner prescribed for items a to e.

**Licensee:** the Person given permission by the County to carry out any of the activities or services for which a license is required under the provisions of this Ordinance.

**Major Appliance:** 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.

**Mixed Municipal Solid Waste:** (a) garbage, Refuse, rubbish and other Solid Waste from residential, commercial, industrial, and community activities that the Generator of the waste aggregates for Collection, except as provided in paragraph (b).

(b)Mixed Municipal Solid Waste does not include auto hulks, street sweepings, ash, construction debris, mining

waste, sludges, tree and agricultural wastes, tires, lead acid batteries, motor and vehicle fluids and filters, and other materials collected, processed, and Disposed of as separate waste streams, but does include source-separated compostable materials.

**MPCA:** the Minnesota Pollution Control Agency.

**Multiple Dwelling Unit:** A residence designed for or occupied by three or more families, including a mobile home park, with separate housekeeping and cooking facilities for each.

**Open Burning:** burning any matter whereby the resultant combustion products are emitted directly to the open atmosphere without passing through an adequate stack, duct, or chimney.

**Operator:** the Person responsible for the operation of a Waste Facility.

**Owner or Waste Facility Owner:** the Facility or legal entity owning a Waste Facility or part of a Waste Facility.

**Person:** 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. With respect to acts prohibited or required herein, Person shall include employees or Licensees, but does not include the Minnesota Pollution Control Agency or the Minnesota Office of Environmental Assistance.

**Processing:** the treatment of Solid 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 facility to another.

**Public Nuisance:** the creation of acts or conditions that unreasonably annoy, injure, or endanger the safety,

health, comfort, or repose of any number of members of the public.

**Recyclable Materials**: materials that are separated from Mixed Municipal Solid Waste for the purpose of Recycling, including, but not limited to, paper, glass, plastics, metals, automobile oil, and batteries. Refuse derived fuel or other material that is destroyed by incineration is not a recyclable material.

**Recycling**: 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.

**Refuse**: putrescible and non-putrescible Solid Wastes, including garbage, rubbish, ashes, incinerator ash, incinerator residue, waste combustor ash, street cleanings, commercial and Industrial Wastes, and municipal treatment wastes which do not contain free moisture.

**Salvaging**: the controlled and authorized removal of reusable waste materials from St. Louis County Solid Waste Facilities for personal reuse, not for sale or redemption.

**Scavenging**: the unauthorized removal of waste or Recyclable Materials from St. Louis County Solid Waste Facilities or containers, or from facilities or containers owned by another Person.

**Self-Hauler**: Person who collects Mixed Municipal Solid Waste which the Person has Generated and transported to a Solid Waste Facility.

**Service Area**: a geographical area within the County, established by resolution of the County Board, to receive Solid Waste Management services.

**Sewage Sludge:** any solid, semisolid, or liquid waste Generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air contaminant treatment facility, or any waste having similar characteristics and effects.

**Site:** the spatial location of a proposed or actual Solid Waste Management activity or Solid Waste Facility.

**Solid Waste:** garbage, Refuse, rubbish, sludge from a water supply treatment plant or air contaminant treatment facility, and other discarded waste materials and sludges, in solid, semi-solid, liquid, or contained gaseous form, resulting from industrial, commercial, mining and agricultural operations, and from community activities, not including 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 effluent 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, special nuclear, or by-product material as defined by The Atomic Energy Act of 1954, as amended. (Minn. Stat. §116.06)

**Solid Waste Hauler:** See Hauler.

**Solid Waste Management Activity:** an activity related to the Generation, storage, Collection, Transportation, Processing or reuse, conversion, or Disposal of Solid Waste.

**Solid Waste Management Area:** that portion of St. Louis County outside of the Western Lake Superior Sanitary District area created pursuant to Minnesota Statutes Chapter 458D.

**Solid Waste Management Plan:** the County Solid Waste management master plan developed, adopted, and

approved under Minn. Stat. §115A.46. The current Solid Waste Management Plan is available by contacting the Environmental Services Director.

**Solid Waste Program:** The County's program for Solid Waste services and facilities, including without limitation, waste Collection, Transportation, Processing and Disposal of Mixed Municipal Solid Waste; licensing of Solid Waste activities and facilities; and the establishment of Service Areas, service rates and charges, and other fees for the operation of the Program within the jurisdictional boundaries of St. Louis County, excluding the jurisdictional area governed by WLSSD.

**Solid Waste Service Fee:** an annual service charge to be applied to all owners, lessors, or occupants having improved properties served by the Solid Waste Program pursuant to Minnesota Statutes Chapter 400.

**Special Waste:** a non-hazardous, Solid Waste, that is not Mixed Municipal Solid Waste and requires management other than that normally required for Mixed Municipal Solid Waste.

**Tipping Fee:** the fee charged at a Waste Facility for waste delivered to that facility based upon weight or volume, character, and type of Solid Waste.

**Transfer Facility:** an intermediate Disposal facility in which Solid Waste from any source is temporarily stored, concentrated or deposited to await Transportation to another Solid Waste Facility. A Transfer Facility can be fixed or mobile and can consolidate waste by means of a trailer or other containers approved for temporary storage of Solid Waste materials.

**Transportation:** the conveying of Solid Waste or Recyclable Materials from one place to another.

**Waste Facility:** all property, real or personal, including negative and positive easements and water and air

rights, which is or may be needed or useful for the Processing or Disposal of Solid Waste, except property for the Collection of the waste and property used primarily for the manufacture of scrap metal or paper. Solid Waste Facility includes but is not limited to Transfer Facilities, Processing facilities, intermittent Disposal, and Disposal Sites and facilities.

**Waste Management:** activities which are intended to affect or control the Generation of waste and activities which provide for or control the Collection, Processing, and Disposal of waste.

**Western Lake Superior Sanitary District (WLSSD):** authority created pursuant to Minnesota Statutes Chapter 458D to provide Solid Waste Management services, including waste water treatment, to the southern portion of the County and to parts of Carlton, and Lake Counties.

**Waste Reduction:** an activity that prevents Generation of waste or the inclusion of toxic materials in waste, including:

- 1 reusing a product 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 to result in smaller quantities or

lower toxicity of waste Generated.

**Yard Waste:** garden wastes, leaves, lawn cuttings, weeds, shrub and tree waste, and prunings.

## **ARTICLE V ADMINISTRATION OF ORDINANCE**

The Environmental Services Director or designee shall administer this Ordinance. The Director's rights and duties shall include, but shall not be limited to, those described in this section:

- 1 To identify the Solid Waste Management needs of the County and to develop and implement plans to meet those needs.
- 2 To advise, consult, and cooperate with other governmental agencies in the furtherance of the purposes of this Ordinance.
- 3 To investigate complaints of violations of this Ordinance and to make recommendations for enforcement or legal actions.
- 4 To negotiate legal agreements for the operation of the Solid Waste Program and such other agreements as are necessary to comply with federal, state and local laws.
- 5 To encourage and conduct studies, investigations, and research relating to aspects of Solid Waste Management including waste reduction.
- 6 To inspect public and private property, in conformance with the law, to determine compliance with the requirements of this Ordinance, or any other applicable statute, or for the purpose of making written notice of any deficiencies or recommendations for their correction and the date by which corrections shall be accomplished.
- 7 To review and grant or deny all license applications submitted under the requirements of this Ordinance.

## **ARTICLE VI UNLAWFUL ACTIVITIES**

### **Section 1. Improper Transportation.**

It shall be unlawful for any Person:

- 1.1 To collect and transport, for a fee, Mixed Municipal Solid Waste or Recyclable Material within the jurisdictional boundaries of the Solid Waste Program, without having obtained a license to do so, or when such license has been revoked or suspended, unless as transported by a Self Hauler.
- 1.2 To collect or transport Solid Waste within St. Louis County in such a way as to violate any requirement of any St. Louis County Ordinance, State or Federal law.
- 1.3 To fail to correct any condition or method of operation which violates any St. Louis County Ordinance or rule applicable to the Collection or Transportation of Mixed Municipal Solid Waste or Recyclable Material after being ordered to do so by St. Louis County.

### **Section 2. Upsetting of Containers Prohibited**

No Person shall willfully turn over or upset any vessel or container used for storing Solid Waste, recyclables, compost or other waste, resulting in spilling the contents or any portion thereof on any roadway, waterway, or on any public or private property.

### **Section 3. Using Containers of Another Prohibited.**

No Person shall place Solid Waste or any other material in a Solid Waste container of another Person without the expressed or implicit consent of that Person. This prohibition shall not apply to trash containers placed for public convenience along streets or sidewalks and in buildings of public accommodation.

### **Section 4. Containment of Solid Waste and Recyclable Materials.**

No Person shall discharge or allow the discharge of liquid, Solid Waste, or Recyclable Materials from any container or vehicle containing Solid Waste or any other waste, or permit such vehicle to stand, be stored or

kept in such manner or for such length of time that it will be or constitute a Public Nuisance.

## **Section 5. Improper Disposal.**

There are opportunities for proper Disposal of Solid Waste throughout St. Louis County.

5.1 Except as provided in this Ordinance, no Person shall Dump, throw or in any manner deposit or Dispose of Solid Waste upon or in any roadway, waterway, body of water, public or private property, or at any MPCA-permitted Waste Facility other than during the facility's operating hours and in a manner consistent with Disposal of Solid Waste at the Waste Facility.

5.2 No Person shall conduct Open Burning of: discarded material resulting from the handling, processing, storage, preparation, serving, or consumption of food; rubber; plastics; chemically treated materials; Hazardous Waste; Industrial Wastes; Demolition Debris; motor vehicles; Solid Waste that is Generated from the resident's household or business; or other materials which produce excessive or noxious smoke including, but not limited to, tires, railroad ties, chemically treated lumber, composite shingles, tar paper, insulation, composition board, sheetrock, wiring, paint, or paint filters. Burning of waste and debris shall be allowed only in compliance with Minnesota Statute § 88.171.

5.3 Except as specifically allowed by Minn. Stat. §17.135, no Person shall bury Solid Waste Generated from the Person's household or business operation.

5.4 No Person shall place or cause to be placed in any Solid Waste Collection container any material not specifically allowed in that container.

## **Section 6. Storage of Waste.**

6.1 The owner and occupant of any premises, business establishment, or industry is responsible for

the satisfactory storage of all Solid Waste accumulated at that premises, business establishment, or industry in compliance with Minnesota Rule 7035.0700 or local ordinances if more restrictive.

6.2 No Person who is not permitted by the State as a tire collector or processor may accumulate more than 50 waste passenger tires or equivalent weight of other waste tires on that Person's premises.

6.3 A Person may not Dispose of Major Appliances in or on the land.

6.4 A Person may not store waste materials in a manner that could cause pollution of the air, water, or soils, or that could cause harm to other's health or well-being.

**Section 7. Duty to Provide Collection, Transportation and Disposal of Solid Waste.**

It shall be the duty of the Person, which specifically includes the owner, lessee or occupant, having properties within the St. Louis County Solid Waste Management Area to provide for the lawful Collection, Transportation, and Disposal of all Solid Waste Generated on such properties.

**Section 8. Items Prohibited For Collection Or Placement With Mixed Municipal Solid Waste.**

8.1 No Person or legal entity shall place in containers for Collection by a Hauler or for Disposal in a Solid Waste Facility any of the following materials: manure, Household Hazardous Waste, Hazardous Waste, pathological waste or Infectious Waste as these wastes are defined by state and federal regulations, materials separated for Recycling, tires, used motor oil, lead acid batteries, rechargeable or button batteries, Yard Waste, mercury or a thermostat, thermometer, electric switch, appliance or a medical or scientific instrument from which the mercury has not been removed for reuse or Recycling, or any other item specifically barred from the waste stream under Minnesota law. These items shall be otherwise Disposed of by a Person or legal entity in accordance with programs administered by the Environmental Services Department and with

Minnesota law.

8.2 When any Hauler finds any of the above-mentioned prohibited articles in Solid Waste containers to be collected, the Hauler may, at its option, refuse to collect the contents of the container. The Hauler shall notify the occupant of the premises of the prohibited articles in the container and the reason for non-collection. If a Hauler chooses to collect prohibited articles the Hauler must transport those articles to a place providing proper Disposal.

**Section 9. Scavenging.**

It shall be unlawful for any Person to remove waste materials, including mixed Solid Waste, Recyclable Materials, scrap metal, appliances, tires, Demolition Material, or other waste materials, from any Solid Waste Facility at any time or from any privately or publicly owned Solid Waste or Recycling container without the express consent of the Operator of that facility or container. This prohibition shall not apply to materials removed from Waste Facilities by contract, or through a managed Salvaging program.

**Section 10. Spills.**

Vehicles or containers used for the Transportation of any Solid Waste must be loaded and moved in a manner that does not allow the contents to fall, leak, or spill therefrom, and must be covered when necessary to prevent blowing of material. Where spillage does occur, the material and any contaminated soils must be picked up immediately by the transporter and returned to the vehicle or container and the area properly cleaned.

## **ARTICLE VII LICENSING PROVISIONS**

### **Section 1. General Licensing Provisions.**

The following general provisions shall apply to all licenses issued by St. Louis County relating to any Solid Waste activities, services or facilities within the jurisdiction of the Solid Waste Management Area.

- 1.1 Non-transferable.** Any license obtained under this Ordinance shall be non-transferable. Licenses issued to corporations, partnerships or associations shall be valid only so long as there is no change in the ownership. Corporations, partnerships or associations holding licenses shall submit written notice to the Environmental Services Department of any such changes in ownership on or before thirty (30) days prior to the effective date of any such change. In the case of a corporation, the Licensee shall notify the Environmental Services Department when a Person or entity not listed in the application acquires an interest, and shall give all information about such Person as is required pursuant to the provisions of this Article.
- 1.2 License Application Requirements and Term.** An application for a license or license renewal shall be made to the Environmental Services Department on forms furnished by the Department. The application shall not be considered complete until the Department has received all information, materials, plans, financial assurance, certificates of insurance, and fees required under this Ordinance. Each license granted pursuant to the provisions of this Ordinance shall expire annually, unless sooner revoked.
- 1.3 Fees.** The County Board shall, by resolution, establish licensing fees including fees for the annual license application, plan review, Site and equipment inspections, as well as late application fees and other fees as may be necessary for the administration of this Ordinance. The fees shall be paid to the County Auditor in the manner specified. No license fee shall be prorated for a portion of a year.

**1.4 Financial Assurance.**

1.4.1 Unless otherwise provided by the County Board, issuance of any hauler license pursuant to the provisions of this Ordinance shall be contingent upon the applicant furnishing to the County financial assurance in an amount and form designated by the County.

1.4.2 The County Board may determine that financial assurance is appropriate for those facilities listed in Article VII, Section 3.1 of this Ordinance, based on their size, operating life, past and existing operational practices, and types of waste accepted at the facility.

**1.5 Insurance.** Unless otherwise provided by the County Board, an applicant shall furnish to the County certificates of insurance issued by insurers duly licensed to do business within the State of Minnesota evidencing insurance coverages and amounts, as established by resolution of the County Board. Certificates of insurance shall require that at least thirty (30) days notice be given to the Environmental Services Director of cancellation of any insurance coverage specified therein.

**1.6 Indemnity.** A Licensee shall indemnify and save the County harmless from all losses, costs and charges that may be incurred by the County due to failure of the Licensee to comply with the provisions of this Ordinance and which are not otherwise payable from the insurance and bond coverage required by this Ordinance.

**1.7 County Fees Waived.** Any Solid Waste Facility, or Transportation vehicles owned and operated by St. Louis County shall fulfill all requirements of this Ordinance with the exception of payment of license fee requirements.

## **1.8 Issuance or Denial of License.**

- 1.8.1 The Environmental Services Department shall have ninety (90) days after receipt of a complete application to issue or deny a license or renewal. Failure by the Department to issue or deny a license shall constitute a denial.
- 1.8.2 When an application for or renewal of a license is denied, the Environmental Services Department shall serve written notice of denial to the applicant stating the basis for its decision. A denial shall be without prejudice to the applicant's right to file a further application after revisions are made to satisfy objections specified as reasons for the denial. Denial of a license may be appealed as provided in Article VIII of this Ordinance.
- 1.8.3 The Environmental Services Department shall refuse to issue a license for any operation which does not comply with this and other St. Louis County Ordinances, MPCA and other state and federal rules and laws, or the County's Solid Waste Management Plan.

## **Section 2. Hauler Collection or Transportation licenses.**

The following provisions shall apply to any Person owning, operating, or leasing vehicles for the purpose of collecting or transporting Mixed Municipal Solid Waste or within the jurisdiction of the Solid Waste Program. This section shall not apply to any Person licensed by a City to collect or transport Solid Waste solely within the jurisdictional boundaries of that City, or to any Person licensed to operate wholly within the jurisdiction of WLSSD, or to Self-Haulers.

- 2.1 Specific Licensing Requirements.** In addition to the general requirements in Article VII, Section 1, an applicant seeking a Hauler's License shall submit the following information to the Environmental Services Department before vehicle may be used for hauling, and by November 15 for annual renewal:

- 2.1.1 Vehicle and route information including:

2.1.1.1 the make, model and year of each vehicle to be used for

Solid Waste Collection and Transportation;

2.1.1.2 each vehicle's rated capacity, tare weight, license plate

number, and state issued registration number; company

vehicle number and County assigned number;

2.1.1.3 the geographical area served by Licensee;

2.1.1.4 the facility or facilities to which the vehicle ultimately

transports waste.

2.1.1.5 certificate of insurance as required by the County.

2.1.1.6 additional information as requested by the

Environmental Services Department.

## **2.2 Equipment and Operation Requirements.**

2.2.1 A Licensee shall maintain all Solid Waste Collection or Transportation vehicles in a safe and sanitary manner. All vehicles shall be equipped with brooms and shovels which shall be used to clean spilled material. All safety equipment, including without limitation, horns, lights, and reflectors shall be in good working order. Each vehicle or conveyance shall be easily cleanable and leak-proof, shall be disinfected on a weekly basis, and shall be covered with metal, canvas, or a fish-net type material so as to prevent escape of Solid Waste or Recyclable Materials while in transit. Each vehicle shall be equipped with pollution control devices or other equipment required by state or federal law.

2.2.2 All Collection and Transportation vehicles owned by the Licensee shall display a County-

issued license decal and vehicle number placed on each vehicle as specified by the Department. In the event that the Licensee must use a replacement vehicle not included in the license application, the Licensee must request a temporary vehicle approval from the Department prior to using the vehicle. A temporary vehicle approval shall be valid for no longer than seven (7) calendar days per request.

- 2.2.3 The capacity of each vehicle and the business name, address and telephone number of a Licensee shall be displayed in legible characters on both sides of every vehicle, container, and conveyances used by the Licensee to store, collect, or transport Mixed Municipal Solid Waste or Recyclable Materials Generated within the County. Such characters shall be in the dimensions determined by the Department.
- 2.2.4 The Licensee shall not collect or Transport Solid Waste from residential sources before 6 a.m. or after 9 p.m.
- 2.2.5 The Licensee shall not allow Solid Waste to remain or be stored in any Collection or Transportation vehicle in excess of forty-eight (48) hours, except in the event of an emergency such as inclement weather, equipment breakdown, or accident.
- 2.2.6 The Licensee shall take reasonable care to protect the property of customers being served, or other property, and shall be responsible for any damage thereto. The Licensee shall be responsible for any damage or spillage of Solid Waste occurring as a result of its action or inaction.
- 2.2.7 The Licensee shall not collect or transport Solid Waste or Recyclable Material that is smoking, smoldering or burning, or that the internal load temperature exceeds 160° Fahrenheit.
- 2.2.8 The Licensee shall be responsible for the cleanup of any Solid Waste or Recyclable Material that must be off-loaded in an emergency. The vehicle Operator or Licensee shall immediately notify the Environmental Services Department and the appropriate law

enforcement agency of such off-loading and shall clean the area within a time limit established by the County or other such law enforcement agency having appropriate jurisdiction.

2.2.9 A Licensee shall be responsible for cleaning up any litter, solid or liquid waste, or Recyclable Material discharged while in transit. If the Licensee fails to perform such a clean-up, the County may charge such Licensee with all costs of removal and Disposal of the spilled material.

2.2.10 The Licensee shall neither discharge nor allow the discharge of liquid waste from any Solid Waste Collection or Transportation vehicle or container, except as a part of a deposited load.

2.2.11 While on County property, the Licensee shall comply with all safety procedures as determined necessary by the Environmental Services Department or on-site representative.

**2.3. Hauler Rates.** As a condition of obtaining and maintaining a license, a Hauler shall impose charges on customers for the Collection of Mixed Municipal Solid Waste at rates based upon the volume or weight of the waste collected.

2.3.1 The County shall determine a volume base unit size for an average small quantity household Generator and establish or require a Licensee to 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 pursuant to Minn. Stat. §115A.93.

2.3.2 The Licensee shall annually provide all customers with written notice of the Hauler's volume or weight based fee structure.

2.3.3 The Licensee shall not impose a greater charge on residents who recycle than on residents who do not recycle.

**2.4 Renewal.** Application for license renewals shall be made in writing to the

Environmental Services Department by November 15

each year.

**Section 3. Waste Management Facility Licenses.**

No Person shall cause, permit, or allow land or property under that Person's control to be used for Solid Waste Processing or Disposal purposes, except at a Site which is consistent with the St. Louis County Solid Waste Management Plan and complies with all County Ordinances, regulations, local, state, and federal guidelines, statutes, rules and regulations. Waste Facilities within the Solid Waste Service Area shall:

1. comply with and maintain documentation of compliance with all state, federal and local regulations; and
2. meet the guidelines set out in this Ordinance, the Solid Waste Management Plan and, where applicable, Certificate of Need; and
3. report pertinent information in a timely manner so that the County can plan and maintain effective Solid Waste Management services throughout the County.

**3.1 Facility License Application:** The following types of facilities shall obtain a Waste Management Facility License from St. Louis County:

3.1A MSW Disposal

3.1B Construction Debris Disposal

3.1C Demolition Debris Disposal

3.1D Industrial Waste Disposal

3.1E Demolition Debris Permit-by-rule Facilities

3.1F MSW Composting

3.1G Solid Waste Transfer Facilities

3.1H Waste Incinerators

3.1.1 In addition to the general requirements in Article VII, Section 1, the application for initial license shall include:

- A. a complete copy of the facility permit granted by the MPCA including a set of complete plans, specifications, design data, and ultimate land use; and
- B. a land use permit as required by the County Zoning Ordinance or the zoning authority having jurisdiction over the proposed location; and
- C. a written statement of how the operation is consistent with the Solid Waste Management Plan and current County Certificate Of Need (CON), if applicable; and
- D. a filing fee as established by the St. Louis County Board.
- E. Certificate of Insurance as required by the County.

3.1.2 The County may require a liner and leachate collection and treatment system based on the composition of waste Disposed at any Land Disposal Facility.

**3.2 Prohibited Disposal facilities:** The County prohibits development of Disposal facilities for the following types of waste:

3.2A Regulated Infectious Waste land Disposal facilities

3.2B Hazardous Waste land Disposal or incineration facilities

3.2C Radioactive waste Disposal facilities

3.2D MSW land Disposal facilities unless need for those facilities has been established in the current County Solid Waste Management Plan.

**3.3 Reporting and Renewal:** It shall be the obligation of the Operator of a Solid Waste Facility in St. Louis County to maintain accurate operation records and to renew the license on an annual basis. To be considered for renewal the Licensee must submit reports as required by the Environmental Services Department.

3.3.1 Accurate daily records of Site operations shall be maintained and made available upon request to County representatives including:

3.3.1.1 Intake of Solid Waste in tons or cubic yards shall be recorded daily in a manner acceptable to the County.

3.3.1.2 General areas in which a particular type of Solid Waste Disposal takes place within a landfill shall be recorded.

3.3.1.3 Disposal of Hazardous Waste is prohibited. All Hazardous Wastes Generated by the facility operation or delivered to the facility by other Persons must be recorded, and documentation of management in accordance with State of Minnesota and Federal regulations and as set out in the facility's operations plan must be reported.

3.3.2 A complete report of materials and volumes Disposed at the facility as reported in the facility's annual report required by the

MPCA shall be submitted to the St. Louis County Environmental Services Department by March 1 of each year.

3.3.3 The Licensee shall submit records of population and areas served by the facility on an annual basis.

3.3.4 Within 24 hours of an emergency incident which results in conditions which may be adverse to public or environmental health, the Licensee shall submit oral notification to the Director of the Environmental Services Department.

3.3.4.1 This report shall be followed with written notification within 48 hours of the incident.

3.3.4.2 When corrective actions are required by County, State or Federal agencies, a report of the incident and actions taken shall be submitted to the Director of the Environmental Services Department within 15 days of completion of the action.

3.3.5 A license renewal application fee in an amount established by the County Board along with an application form and all required reports shall be submitted by March 1<sup>st</sup> of each year.

3.3.6 At any time the Licensee submits application for renewal or modification of their MPCA facility permit a copy of that application must be submitted to the County and the process for initial license application for Waste Management Facility license shall be followed.

**3.4 Continuation of Expired License.** A Person who holds an expired Waste Management Facility License and who has submitted a timely and complete application for re-issuance of the permit may continue to conduct the permitted Solid Waste Management activity until the County takes final action on the application, if the Environmental Services Director determines that all of the following are true:

3.4.1 The Licensee is in compliance with the terms and conditions of the expired license, County Ordinances and other state and federal regulations, and the Solid Waste Management Plan; and

3.4.2 The Environmental Services Director, through no fault of the Licensee, has not taken action on the application on or before the expiration date of the license; and

3.4.3 The Licensee demonstrates that there is remaining permitted capacity.

**3.5 Surcharges.** The County Board may set surcharge fees pursuant to Minn. Stat. § 115A.919 on MSW or Construction Debris Disposed at facilities located within the County in addition to other taxes and landfill clean up fees imposed by the State (Minn. Stat. §115A.923.)

3.5.1 Expenditure of funds collected under this section shall comply with Minn. Stat. §

115A.919.

3.5.2 Any facility Operator subject to the fees imposed by this provision shall file a surcharge fee monthly return in the following manner:

3.5.2.1 Monthly returns shall be on a reporting form prescribed by the Environmental Services Department.

3.5.2.2 The return shall be signed by the facility Operator or a Person authorized by the facility Operator to do so.

3.5.2.3 A check for the full amount of the surcharge fee and made out to the St. Louis County Auditor must accompany the return form.

3.5.2.4 The return shall be filed with the Department on or before the last day of the month immediately following the month in which the fee was incurred by the facility.

3.5.3 The County or its designated agent shall have the right to examine and/or copy records required by this Ordinance.

3.5.4 Non-payment of surcharge fees shall be grounds for denial of a license application or renewal.

**3.6 Closure Requirements:** In addition to closure procedures required by the MPCA, the Operator shall submit a detailed map to the Environmental Services Department upon closure of a Disposal facility.

3.6.1 Documents submitted must show the nature and location of the waste Disposed at the facility.

3.6.1.1 Complete location details of any regulated wastes such as asbestos shall be submitted to the Department and recorded on the property deed.

3.6.1.2 A complete list of Industrial Waste customers and associated waste characterization data and Disposal location shall be submitted.

3.6.2 Documents submitted must show the property lines of the facility and all adjacent property ownership at the time of closure.

3.6.3 A letter from the Operator shall be sent to all adjacent property owners notifying them of the closure requirements and the ultimate use of the land on which the Disposal facility is located. This letter must be sent by certified mail within 30 days of the completion of closure requirements with a copy sent to the Environmental Services Director at the same time.

**3.7 Jurisdiction of the Solid Waste Management Plan.** A public entity within St. Louis County may not enter into a binding agreement nor develop nor implement a Solid Waste Management activity that is not consistent with the Solid Waste Management Plan without the express consent of the County.

## **ARTICLE VIII SOLID WASTE MANAGEMENT FEES**

The following provisions are enacted pursuant to Chapter 400 of the Minnesota Statutes which authorizes the County to create and to impose charges within the County's jurisdiction for Solid Waste Management services and may levy a tax on all property in that jurisdiction, or may designate any combination of taxes and service charge methods.

### **Section 1. Establishment of Charges.**

A Solid Waste Management Fee shall be imposed for Solid Waste Management Services provided by the County within a Service Area. Generators (owners, lessees, or occupants, or property in the Solid Waste Management Area, or any or all of them) shall pay charges other than a tax levy, designated as the Solid Waste Management Fee and Tipping Fees imposed in the manner set forth herein in amounts as established by the County Board.

In establishing charges the County Board shall, in its discretion, take into account the costs of: Solid

Waste Program administration; economic incentives; financial assurance for Solid Waste Facilities, transporting waste between or from County Solid Waste Facilities; Hazardous Waste Collections; Solid Waste Service Fee management; and Recycling. The County may also consider volume or tonnage of Solid Waste delivered to facilities; the character and kind of Solid Waste delivered to facilities, the method of Disposition, and Solid Waste Facilities' costs. Charges may also include facilities' replacement funding, reserves funding, and funding for landfill closure costs and any other factors which the County may determine have an impact on the cost of Solid Waste Management in the County.

## **Section 2. Charging Methods.**

**2.1 Solid Waste Service Fees.** The County Board may, in its discretion, establish a fee to be charged to all improved properties served by the St. Louis County Solid Waste Program. When so established, Persons who are owners, lessees or occupants of all properties located within Service Areas, or any or all of them, shall be obligated to pay Solid Waste service fees for services so provided for their properties and, if unpaid, the charges shall become a lien on the properties.

In those Cities having mandatory Solid Waste Collection, the Solid Waste Service Fee shall be billed to each City in an amount equal to the total charges for all properties owned, leased or occupied by Persons or legal entities within the City as verified annually by the City. In the discretion of the County such billing may be done on a quarterly basis.

**2.2 Tipping Fees.** The County Board may, by resolution, designate an amount and method of payment for Tipping Fees, which shall be a charge to users for services provided at County Solid Waste Facilities. The Environmental Services Director may, under contract approved by the County Board, apply reduced Tipping Fees to local units of government which contract for Disposal at County-owned facilities.

## **Section 3. Billing and Collection.**

The method of billing, the system of assessing service fees, and Collection of service fees shall be determined

by resolution of the County Board. The following procedures shall apply to the billing and collection of Solid Waste Service Fees.

**3.1 Real Estate Including Exempt Property.** On or before October 15 of each year, the County Board shall certify to the County Auditor Solid Waste Service Fees and a description of the lands against which the charges arise. It shall be the duty of the County Auditor, upon order of the County Board, to extend the charges upon the tax rolls of the County for the taxes of the year in which the charge is filed 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 of Minnesota. 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.

**3.2 Structures on Government Leased Land.** Charges for structures on government leased land will be billed directly to the lessee and shall be paid by October 15 of each year. Unpaid charges will be subject to the same penalties as unpaid personal property taxes. Unpaid charges and penalties may be collected in a civil action or through such other means as may be approved by the St. Louis County Board.

**3.3 Multiple Family Dwelling Unit Properties.** Charges for Solid Waste services for Multiple Family Dwelling Unit properties shall be billed to the owner of the property, real or personal, in accordance with Section 3.1.

**3.4 Manufactured Homes.**

**3.4.1** Charges for Solid Waste services to manufactured homes, which  
are taxed pursuant to Minn. Stat. §274.19, subd. 7 and not located  
in a manufactured home park shall be billed to the owner of the real  
property on which the manufactured home is located pursuant to

the procedures in Section 3.1.

**3.4.2** Charges for Solid Waste services to manufactured homes which are valued and assessed as an improvement to real property shall be billed and collected pursuant to the procedures in Section 3.1.

**3.4.3** Unpaid charges and penalties will be collected in the same manner as delinquent charges under Section 3.1 or may be collected in a civil action or through such other means as may be approved by the St. Louis County Board.

**3.5** **Charges to Cities.** If a City, as defined in Section 2.1, does not pay the balance due on the Solid Waste Service Fee billed for properties located within the City by October 15 of any year, the County shall proceed to apply the unpaid Solid Waste Service Fee charges and penalties to all properties located within the boundaries of the City and will include these charges and penalties on property tax statements for the following year in the manner provided in Section 3.1.

**3.5.1** With respect to property classified as structures on government leased land within the boundaries of a City, if the City does not pay the Solid Waste Service Fee billed for such property by October 15 of any year, the County shall forthwith bill the owners, occupants and lessees of such properties directly for the unpaid fees and such fees shall be paid by December 31 of that year or the unpaid charge and interest may be collected in a civil action or through such other means as may be approved by the St. Louis County Board.

**3.5.2** With respect to property classified as manufactured homes within the boundaries of a City, if the City does not pay the Solid Waste Service Fee billed for such property by October 15 of any year, the County shall bill the owner of the real property on which the manufactured home is located in accordance with Section 3.1.

**Section 4. Fee Appeals.**

Any property owner, lessee, or occupant may appeal a Solid Waste Service Fee charge only on the basis that the charge has been incorrectly applied to a specific property which has been mis-classified or if the property is vacant or uninhabited. The appeal must be made on a form provided by the Environmental Services Department on or before December 15 of the tax payable year.

The Environmental Services Department shall, within sixty (60) days of receipt of the appeal, review the appeal and notify the appellant in writing whether an adjustment is due and, if so, the amount of such adjustment, or whether the appeal is denied.

**ARTICLE IX ENFORCEMENT OF ORDINANCE PROVISIONS**

**Section 1. Inspections.**

Inspection of Solid Waste Management Activities, Facilities and/or a Licensee's premises shall be made by the Department in such frequency as to insure consistent compliance by the Licensee with this Ordinance.

- 1.1 The applicant or Licensee shall allow free access to Authorized Representatives of the Department at any reasonable time for the purpose of making such inspections as may be necessary to determine compliance with the requirements of all County Ordinances, or rule or statute.
- 1.2 Failure of the applicant or Licensee to permit such inspection shall be grounds for denial, suspension or revocation of a license. The Licensee shall be provided with written documentation of any deficiencies and the date by which the corrections shall be completed.
- 1.3 Whenever necessary to enforce any provision of this Ordinance, or whenever the County has reasonable cause to believe that a violation of this Ordinance exists, the County may enter premises or vehicles to inspect the same or to perform any duty incumbent upon the Department, provided that if such premises or vehicles be occupied, the Authorized Representative shall first present proper credentials and request entry; and if such premises or vehicles be unoccupied, the Department shall first make a reasonable effort to locate the

Operator or other Persons having charge or control of the premises or vehicle and request entry. If such entry is refused, the Department may order an emergency suspension, suspension or revocation of a license and shall have recourse to other remedies provided by law.

- 1.4 Whenever the Department or its Authorized Representatives shall find in any building, vehicle, or on any premises any material, condition or activity endangering the health, welfare or safety of the public, the Department shall issue such orders as may be necessary for the enforcement of this or other applicable County ordinances governing and safeguarding the health, welfare and safety of the public.
- 1.5 Repeated violations of this Ordinance or failure to comply with any order of the Department, shall be grounds for emergency suspension, suspension or revocation of a license.
- 1.6 Any order or notice issued or served by the Department shall be complied with by the Owner, Operator or other Person responsible for the condition or violation to which the order or notice pertains. Every order or notice shall set forth a time limit for compliance depending on the nature of and the danger created by the violation. In cases of extreme danger to health, welfare and safety of the public, immediate compliance shall be required.
- 1.7 If a building, premises or vehicle is owned by one Person and occupied or operated by another, under lease or otherwise, and the order or notice requires immediate compliance for the health, welfare and safety of the public, such order or notice shall be served on the Owner, Operator or occupant and the Owner, Operator or occupant shall ensure compliance with the order or notice.

**Section 2. Re-inspections.**

Upon written notification from the Licensee that all the violations for which a suspension or emergency suspension has been issued have been corrected, the Department shall re-inspect the Solid Waste Management Activity within 5 (five) County business days. If the Department finds upon such re-inspection that the violation has been corrected, the Department shall inform the Licensee of reinstatement of the License.

### **Section 3. Action Authorized.**

For violations of this Ordinance, the County may take the following actions: issuance of a Warning Notice; issuance of a Notice of Violation; issuance of Citation(s); issuance of an Abatement Order if authorized by law; emergency suspension, suspension or revocation of a license issued under this Ordinance; execution of a Stipulation Agreement; and/or commencement of other civil proceedings.

**3.1 Warning Notice.** The Department may issue a Warning Notice as defined in this Ordinance to any Person alleged to have committed a violation of this Ordinance. A Warning Notice shall serve to place the Person on notice that compliance with specified Ordinance requirements must occur to avoid additional enforcement actions. A Warning Notice may be in the form of an Inspection report for a Licensed facility. A Warning Notice may be served in person or by mail.

**3.2 Notice of Violation (NOV).** The Department may issue a Notice of Violation (NOV) as defined in this Ordinance to any Person alleged to have committed a violation of this Ordinance. A NOV shall serve to place the Person alleged to have committed a violation on notice that compliance with specified Ordinance requirements must occur to avoid additional enforcement actions. The NOV shall be served by certified mail or by personal service on the Person(s) alleged to have committed a violation of this Ordinance.

**3.3 Citations.** Any Person who fails to comply with the provisions of this Ordinance is guilty of a misdemeanor, and upon conviction thereof, shall be punished as provided by law. A separate offense shall be deemed committed each day during or on which a violation occurs or continues. An Authorized Representative of the Department or Sheriff's Office shall have the power to issue Citations for violations of this Ordinance, but shall not be permitted to physically arrest or take into custody any violator except on a warrant duly issued by the Court.

#### 3.3.1 Issuance of the Citation

Citations shall be issued to the Person alleged to have committed the violation either by personal delivery or by certified mail. In the case of a public, private or municipal corporation, the Citation shall be issued to any officer or agent with express or implied

authorization to accept such issuance.

### 3.3.2 Notice of Citation

Citations shall be made out in quadruplicate (4). One copy shall be issued to the Person alleged to have committed the violation; one copy shall be filed with the Department; one copy shall be filed with the County Attorneys Office; and one copy shall be filed with the District Court.

### 3.3.3 Form of Citation

Citations shall be on such form(s) as approved by the Department and shall contain at least the following:

3.3.3.1 The name and address of the Person charged with a violation.

3.3.3.2 The date and place of the violation.

3.3.3.3 A short description of the violation followed by the sections of the Ordinance violated with reference made to all other pertinent Ordinance provisions.

3.3.3.4 The date and place at which the Person receiving the citation shall appear and a notice that if such Person does not respond, a warrant may be issued for such Person's arrest.

### 3.3.4 Court Appearance

The Person charged with the violation shall appear at the place and on the date specified in the Citation and either:

3.3.4.1 Plead guilty to the Citation and meet the requirements of the sentencing order issued by the court; or

3.3.4.2 Plead not guilty to the Citation and schedule a court date for further hearing or trial on the Citation.

### 3.3.5 Failure to Appear on the Citation

If the Person charged with the violation does not appear at the place and on the date specified on the Citation a bench warrant may be issued by the Court.

### 3.3.6 Complaint

3.3.6.1 If the Person issued the Citation and charged with the violation fails to appear as required by the Citation, the Citation may be referred to the County Attorney's Office for issuance of a summons and complaint.

3.3.6.2 At their discretion, the County Attorney's Office may issue a summons and complaint initially.

**3.4 Abatement.** In the event of an emergency abatement by the County as described in Section 2.04(E) below, or if a property owner does not complete Corrective Actions within the timelines given in a NOV, a Stipulation Agreement or a court order, the Department may abate the violations and the Department has the authority to enter the property and perform the Corrective Actions and recover the costs of the same from the property owner through the following procedures:

#### 3.4.1 Abatement Notice

##### 3.4.1.1 Contents of Abatement Notice

An Abatement Notice shall include the following:

- a. Notice that the property owner has not completed the Corrective Actions within the time period required in the attached NOV(s), Stipulation Agreement or court order;
- b. Notice that the Department or its agent intends to enter the property and commence abatement of the conditions on the property that violate this Ordinance in thirty days;
- c. Notice that the property owner must correct the violation(s) before

thirty days to avoid any civil liability for the costs of inspection and abatement that the County may incur; and

- d. A statement that if the property owner desires to appeal, the property owner must file a request for an appeal hearing with the County Auditor or County Board Chair with a copy sent to the Director pursuant to Minnesota Statute 373.07 that meets the requirements of Section 2.04(B) below on the County within ten (10) County working days, exclusive of the day of service.

#### 3.4.1.2 Service

The Abatement Notice must be served on a property owner by certified mail or personal service. Service by certified mail shall be deemed complete upon mailing. If the property owner is unknown or absent and has no known representative upon whom the Abatement Notice can be served, the Department shall post the Abatement Notice at the property. The Department must send a copy of the Abatement Notice to the County Attorney's Office.

### 3.4.2 Right to Appeal the Abatement Notice

#### 3.4.2.1 Request for Hearing

The property owner's request for a hearing must be in writing and must state the grounds for appeal and be served by certified mail on the County Board, with a copy to the Department by the close of the 10th County working day following service of the Abatement Notice. Following receipt of a request for a hearing, the County Board shall set a time and place for the hearing to be held pursuant to Section 3.0 below.

#### 3.4.2.2 Stay of Notice

Pending the appeal hearing and final determination by the County Board the Department shall take no further action on the Abatement Notice.

### 3.4.3 Abatement by the County

In the event a property owner does not abate the Ordinance violations or does not appeal the Abatement Notice within the applicable time period, the Department may expend funds necessary to abate the violation(s) in accordance with applicable County policies and procedures:

### 3.4.4 Recovery of Abatement Costs

3.4.4.1 The Department may pursue recovery of all costs, including enforcement costs, from the property owner for abatement incurred by the County, by any means allowable by law. The cost of any enforcement action may be assessed and charged against the Real Property on which the violations are located.

3.4.4.2 The Department shall keep a record of the costs of abatements done under this Ordinance and report all work done for which assessments are to be made, stating and certifying the description of the land, lots or parcels involved and the amount assessable to each to the County Auditor by September 1 of each year.

3.4.4.3 On or before October 1 of each year, the County Auditor shall list the total unpaid charges for each abatement made against each separate lot or parcel to which they are attributable under this Ordinance to the County Board.

3.4.4.4 The County Board may then spread the charges or any portion thereof against the property involved as a special assessment, for certification to the County Auditor and for collection the following year along with current taxes.

### 3.4.5 Emergency Abatement by County

Notwithstanding the requirements of Section 1.0 of this Article, in the event of an imminent threat to the public's health, welfare and safety, the Department shall have the authority to immediately enter property and abate the violations and recover the costs as set out in Section 2.04(D) above. The Department shall attempt to give verbal notice to the property owner immediately, if possible, and writing within 10 work days. The property owner shall have the right to appeal the assessment of costs to the County Board pursuant to Section 3 of this Article.

**3.5 Stipulation Agreement.** The Department and a Person alleged to have violated provision(s) of this Ordinance may voluntarily enter into a Stipulation Agreement, whereby the parties to the agreement: identify conditions on the property that require Corrective Action; agree on the Corrective Actions that must be performed by the Person; and agree on the timelines in which the Corrective Actions must be completed. If the timelines have not been met as agreed in the Stipulation Agreement, the County may abate the violations in accordance with Section 2.04 above. The parties may seek compliance with the terms of the Stipulation Agreement through a court of competent jurisdiction.

### **3.6 Special Assessment for Removal of Unauthorized Deposit of Solid Waste.**

In addition to the remedies set forth above in Sections 2 and 3, at the discretion of the County, all costs for removal of unauthorized deposits of Solid Waste or corrective action may be certified to the County Auditor as a special assessment against real property.

### **3.7 License Suspensions.**

3.7.1 Any license required under this Ordinance may be suspended by the Director for violation of any provision of this Ordinance. Upon written notice to the Licensee a license may be suspended by the Director or designee for a period not longer than sixty (60) days or until the violation is corrected, whichever is shorter.

3.7.2 Such suspension shall not occur earlier than ten (10) County working days after written notice of

suspension by the Director has been served on the Licensee or, if a hearing is requested, until written notice of the determination of the Director's action has been served on the Licensee. Notice to the Licensee shall be served personally or by registered or certified mail at the address designated in the license application. Such written notice of suspension shall contain the effective date of the suspension, the nature of the violation or violations constituting the basis for the suspension, the facts which support the conclusion that a violation or violations has occurred, and a statement that if the Licensee desires to appeal, he must within ten (10) County working days, exclusive of the day of service, file a request for an appeal hearing with the County Board. The hearing request shall be in writing stating the grounds for appeal and served personally or by certified mail on the County Board, with a copy to the Department by the close of the 10th County working day following service. Following receipt of a request for a hearing, the County Board shall set a time and place for the hearing to be held pursuant to Section 3.0 below.

### 3.7.3 Continued Suspension

If said suspension is upheld and the Licensee has not demonstrated within the sixty (60) day period that the provisions of the Ordinance have been complied with, the County Board may serve notice of continued suspension for up to sixty (60) days or initiate revocation procedures.

## 3.8 **Emergency Suspension.**

3.8.1 If the Environmental Services Department finds that the health, safety or welfare of the public requires emergency action, the Department may order an emergency suspension of a license. Written notice of such emergency suspension shall be served on the Licensee, or shall be served by certified mail to said Licensee at the address designated in the license application.

3.8.2 The emergency suspension shall not be stayed pending an appeal to the County Board or an informal review by the Director, but shall be subject to dismissal upon a favorable re-inspection by the Department or favorable appeal to the County Board.

**3.9 Suspension Re-Inspections.** Upon written notification from the Licensee that all violations for which a suspension or emergency suspension was invoked have been corrected, the Department shall re-inspect the facility or activity within a reasonable length of time, but in no case more than five (5) County working days after receipt of the notice from the Licensee. If the Department finds upon such re-inspection that the violations constituting the grounds for the suspension have been corrected, the Department shall immediately dismiss the suspension by written notice to the Licensee, served personally or by certified mail on the Licensee at the address designated in the license application, with a copy to the County Board and the County Attorney's Office.

**3.10 License Revocation.**

3.10.1 Any license granted pursuant to this Ordinance may be revoked by the Director for violation of any provision of this Ordinance.

3.10.2 Revocation shall not occur earlier than ten (10) County working days from the time that written notice of revocation from the Director is served on the Licensee or, if an appeal hearing is requested, until written notice of the County Board's action has been served on the Licensee. Notice of revocation to the Licensee shall be served personally or by certified mail at the address designated in the license application. Such written notice of revocation shall contain the effective date of the revocation, the nature of the violation or violations constituting the basis for the revocation, the facts which support the conclusion that a violation or violations has occurred and a statement that if the Licensee desires to appeal, he must within ten (10) County working days, exclusive of the day of service, file a request for a hearing with the County Board. The hearing request shall be in writing stating the grounds for appeal and served personally or by certified mail on the County Board, with a copy to the Department and the County Attorney's Office, by the close of the 10th County working day following service. Following receipt of a request for a hearing, the County Board shall set a time and a place for the hearing to be held pursuant to Section 3.0 below.

**3.11 Status of Financial Assurance.** Financial Assurance issued for the facility shall remain in full force

and effect during all periods of suspension, emergency suspension and revocation of the license and is subject to claim by the County in accordance with the provisions of this Article.

**3.12 Commencement of a Civil Court Action.** In the event of a violation or a threat of violation of this Ordinance, the County may also institute other appropriate civil actions or proceedings in any court of competent jurisdiction, including requesting injunctive relief, to prevent, restrain, correct or abate such violations or threatened violations. The County may recover all costs, including reasonable attorney's fees, incurred for enforcement of this Ordinance through a civil action. If a property owner does not complete the Corrective Actions within the timelines in a court order, the Department may correct the violations and the Department has the authority to enter the property and perform the Corrective Actions. The Department may recover the costs of the same from the property owner through the court process or through the process set out in Section 2.04(D) above.

#### **Section 4. Hearings.**

A request for hearing on a denial, suspension, emergency suspension, non-renewal, or revocation of a license, or receipt of a Notice of Abatement shall be held before the County Board, or a hearing examiner as provided below, and shall be open to the public. If a request for a hearing is not filed within the specified time period, the opportunity for a hearing is forfeited and the action of the Environmental Services Department becomes final and binding.

**4.1 Timeframe for Hearing.** Unless an extension of time is requested by the appellant in writing directed to the Chair of the County Board and is granted, the hearing will be held no later than forty-five (45) calendar days after the date of service of request for a hearing, exclusive of the date of such service. In any event, such hearing shall be held no later than ninety (90) calendar days after the date of service of request for a hearing, exclusive of the date of such service.

**4.2 Notice of Hearing.** The County Board shall mail notice of the hearing to the appellant, with a copy to the Department and the County Attorney's Office, at least fifteen (15) working days prior to the hearing. Such notice shall include:

4.2.1 A statement of time, place and nature of the hearing.

4.2.2 A statement of the legal authority and jurisdiction under which the hearing is to be held.

4.2.3 A reference to the particular Section of the Ordinance and Agency Rules, if any, involved.

**4.3 Hearing Examiner.** The County Board may by resolution appoint an individual or the Solid Waste Subcommittee, to be known as the hearing examiner, to conduct the hearing and to make findings of fact, conclusions and recommendations to the County Board. The hearing examiner shall submit the findings of fact, conclusions and recommendations to the County Board in a written report, and the County Board may adopt, modify or reject the report.

**4.4 Conduct of the Hearing.** The appellant and the Department may be represented by counsel. The Department shall be represented by Department staff or by the County Attorney's Office. The Department, the appellant, and additional parties, as determined by the County Board or hearing examiner, in that order, shall present evidence. All testimony shall be sworn under oath. All parties shall have full opportunity to respond to and present evidence, cross-examine witnesses, and present argument. The County Board or hearing examiner may also examine witnesses.

**4.5 Burden of Proof.** The Department shall have the burden of proving its position by a preponderance of the evidence, unless a different burden is provided by substantive law, and all findings of fact, conclusions, and decisions by the County Board shall be based on evidence presented and matters officially noticed.

**4.6 Admission of Evidence.** All evidence that possesses probative value, including hearsay, may be admitted if it is the type of evidence on which prudent Persons are accustomed to rely in the conduct of their serious affairs. Evidence that is incompetent, irrelevant, immaterial or unduly repetitious may be excluded. The hearing shall be confined to matters raised in the Department's written notice of denial, suspension, emergency suspension, non-renewal or revocation of a license, denial of a variance, or Abatement Notice or in the appellant's written

request for a hearing.

**4.7 Pre-Hearing Conference.** At the request of any party, or upon motion of the County Board or hearing examiner, a pre-hearing conference shall be held. The pre-hearing conference shall be conducted by the hearing examiner, if the County Board has chosen to use one, or by a designated representative of the County Board. The pre-hearing conference shall be held no later than five (5) County working days before the hearing. The purpose of the pre-hearing conference is to:

4.7.1 Clarify the issues to be determined at the hearing.

4.7.2 Provide an opportunity for discovery of all relevant documentary, photographic or other demonstrative evidence in the possession of each party. The hearing examiner or County Board's representative may require each party to supply a reasonable number of copies of relevant evidence capable of reproduction.

4.7.3 Provide an opportunity for discovery of the full name and address of all witnesses who will be called at the hearing and a brief description of the facts and opinions to which each is expected to testify. If the names and addresses are not known, the party shall describe them thoroughly by job duties and involvement with the facts at issue.

4.7.4 If a pre-hearing conference is held, evidence not divulged as provided above shall be excluded at the hearing unless the party advancing the evidence took all reasonable steps to divulge it to the adverse party prior to the hearing and:

4.7.4.1 The evidence was not known to the party at the time of the pre-hearing conference; or

4.7.4.2 The evidence is in rebuttal to matters raised for the first time at or subsequent to the pre-hearing conference.

**4.8 Failure to Appear.** If the appellant fails to appear at the hearing, they shall forfeit any right to a

public hearing before the County Board or hearing examiner and their failure to appear shall be deemed their waiver of their right to appeal the decision made by the Department and the decision made by the Department will stand.

**4.9 Appeal of County Board Decision.** Any appellant aggrieved by the decision of the County Board may appeal that decision to any Court with appropriate jurisdiction.

## **ARTICLE X ADDITIONAL REQUIREMENTS AND PROVISIONS**

### **Section 1. Waivers or Modifications.**

Due to the great variability in the types of Solid Wastes and their existing and potential management methods, the Environmental Services Department may waive or modify the strict application of the provisions of this Ordinance by reducing or waiving certain requirements when, in the discretion of the Environmental Services Department, such requirements are unnecessary or impractical, provided such a waiver or modification will not endanger the health, safety, and welfare of the public, or the environment. The Department may impose additional requirements through solid waste management activity or facility specific license conditions when deemed necessary to protect the health, safety, and welfare of the public, or the environment.

### **Section 2. Agency Approval.**

No modification or waiver may be granted if it would result in noncompliance with State and Federal laws, unless such modification or waiver has been granted by the Minnesota Pollution Control Agency.

### **Section 3. Planning and Zoning approval.**

Any use of land for Solid Waste Management facilities within St. Louis County shall comply with the zoning requirements of Ordinance 46 or the zoning requirements of local authorities, if present.

**Section 4. Promotion of Public Health, Safety, and Welfare.**

Where the conditions imposed by any provision of this Ordinance are either more restrictive or less restrictive than comparable conditions imposed by any other provisions of this Ordinance, or any other applicable law, ordinance, rule, and regulation, the provision which establishes the higher standard for the promotion and protection of the health, safety, and welfare of the public shall prevail.

**Section 5. Indemnification.**

This Ordinance shall not be construed to hold the Environmental Services Department, St. Louis County or any County officer or employee responsible for any damage to Persons or property by reason of the inspection or reinspection authorized herein; or by reason of the approval or disapproval of equipment or licensing herein; nor for any action in connection with the inspection or control of Solid Waste or in connection with any other official duties.

**Section 6. No Consent.**

Nothing contained in this Ordinance shall be deemed to be a consent, license, or permit to locate, construct, operate, or maintain any Solid Waste Facility, or to carry on any activity prior to issuance of a license hereunder.

**Section 7. Severability.**

If any provision of this Ordinance or its application to any Person or circumstance is held invalid, said invalidity does not affect other provisions or applications of the ordinance which can be given effect without the invalid provision or application, and for this purpose the provisions of the Ordinance are severable.

**Section 8. Effectuation.**

This amendment to Ordinance No. 45 - Solid Waste Ordinance, shall take effect and be in full force on the 1<sup>st</sup> day of August, 2008, upon its adoption by the St. Louis County Board of Commissioners and its publication in the official newspaper(s) of St. Louis County as provided by Minnesota Statutes.

A public hearing was held by the St. Louis County Board of Commissioners on July 22, 2008.

Commissioner \_\_\_\_\_ moved the adoption of this Ordinance, and Commissioner \_\_\_\_\_ seconded the motion, and it was adopted on the following vote:

Yeas:

Nays:

Absent:

---

Mike Forsman, Chair  
St. Louis County Board

Certified as a complete and accurate copy of Ordinance No. 45,  
Solid Waste Ordinance

---

Donald Dicklich, County Auditor

ATTEST:

---

Paul Tynjala, Deputy Auditor  
Clerk of the County Board

*This document printed on 100% post-consumer recycled content paper.*

## Appendix F Recycling Information

### ITEMS WE CANNOT COLLECT AT THIS TIME IN THE ST. LOUIS COUNTY RECYCLING PROGRAM.

Examples of items NOT allowed in the drop-off bins or curbside recycling programs in St. Louis County include:

- Plastic bags
- Improperly sorted materials
- Tissue or gift wrapping paper
- Egg cartons
- Food or grease contaminated materials
- Paper cartons from frozen foods or other wax or plastic coated papers such as milk cartons
- Misc. metals such as hangers, pipe, pots and pans, aluminum plates
- Window glass, light bulbs, ceramic materials, dishes or drinking glasses
- Misc. plastics such as toys, dishes, whipped topping or margarine tubs, hangers, lawn ornaments.

• • • • •  
For questions on other items call the St. Louis County Solid Waste Division at 749-9703 or 1-800-450-9278



307 First St. S., Ste. 115  
Virginia, MN 55792  
[www.stlouiscounty.org/recycle](http://www.stlouiscounty.org/recycle)

## Recycling Information for St. Louis County Residents

Includes Recycling Bin drop-off locations within the St. Louis County Solid Waste Management Area

SAINT LOUIS COUNTY  
**ENVIRONMENTAL SERVICES**  
BETTER WASTE SOLUTIONS

St. Louis County Environmental Services Department  
Solid Waste Division

749-9703  
1-800-450-9278  
[stlouiscounty.org/recycle](http://stlouiscounty.org/recycle)

## Appendix F Recycling Information (Cont)

**THANKS FOR  
RECYCLING!**

In order to assure effective recycling in St. Louis County please follow these simple directions.

**RECYCLING CANS AND BOTTLES:**

**Recycle all #1 and #2 plastic bottles and jars with a screw on cap.**

Remove and throw away the cap. Rinse, drain and flatten bottle and store in a paper grocery bag or a bin.

**Recycle aluminum, tin and bi-metal food and beverage cans.** Rinse, drain and flatten and store with the plastics or separately in a paper grocery bag or bin.



**Recycle all glass food and beverage bottles and jars.** Remove and throw away the lids. Rinse, drain and store in a paper grocery bag or bin.

**At the drop-off bin place the cans and bottles in the appropriate bin and the paper grocery bags in the paper bin.**

**If you have curbside collection, place filled bags out on your recycling day.**

**RECYCLING MIXED PAPER:**

**Recycle all newspaper, magazines. "junk" mail and boxboard.** Divide catalogs and phone books into 1/2 inch thick parts. Place mixed papers into a paper grocery bag or loosely into a bin. Put mixed papers into the paper bin at the drop-off site along with your paper bag.

If you have curbside collection please make sure that your materials won't blow down the street when you put them at the curb.



**RECYCLING CARDBOARD:**

**Cardboard is not allowed in the blue County recycling drop-off bins.** All available curbside programs pick up cardboard which has been cut or flattened into 2'x2' sections.

Cut or flattened cardboard may also be dropped off at the following locations for recycling:

- Northwoods and Cook Transfer Stations;
- City of Virginia Recycling site, 1910 13th Ave. S.;
- Hibbing Recycling Center, 1600 Plant Road, call 969-7465 for hours;
- City of Aurora Public Works Garage, call 229-2231 for hours;
- Hoyt Lakes Recycling Center, call 225-2832 for hours.

**NO PIZZA BOXES OR WET OR WAXED COATED CARDBOARD PLEASE!**

**SPECIAL WASTE RECYCLING PROGRAMS:**

St. Louis County residents may bring the following materials to one of several St. Louis County Solid Waste sites for FREE:

- 2 appliances per trip
- 4 tires per trip
- 4 four ft. fluorescent tubes per trip
- 4 drained oil filters per trip
- Used oil, car batteries and antifreeze
- Scrap metal
- Yard waste, brush and branches

**Call for a location near you!**



**RESIDENTIAL HAZARDOUS WASTE CAN BE BROUGHT TO ONE OF THE HHW FACILITIES:**

- **Near the Regional Landfill, Virginia on Tuesdays and Saturdays 8am—1pm**
- **At the Hibbing Transfer Station on Saturdays 8am—1pm.**



**St. Louis County Environmental Services Department  
Solid Waste Division**

307 First St. S., Ste. 115  
Virginia, MN 55792  
[www.stlouiscounty.org/recycle](http://www.stlouiscounty.org/recycle)

**Phone: 749-9703  
1-800-450-9278  
Fax: 218-749-0650**

## Appendix F Recycling Information (Cont)

### CURBSIDE RECYCLING

Curbside recycling programs are available in the following cities within the St. Louis County Solid Waste Management Area:

<u>City Contact</u>	<u>Phone no.</u>
Chisholm Public Works	254-7920
Cook City Hall	666-2200
Eveleth Public Works	744-4215
Hibbing: Sanitation Services	969-7465
Mt. Iron Public Works	748-7570
Virginia Public Works	748-7515

# Complete the cycle!

Look for the recycling symbol when you shop

Collect      Make New Products

Sort and Process

# Buy Recycled!

## Appendix F Recycling Information (Cont)



### ST. LOUIS COUNTY ENVIRONMENTAL SERVICES RECYCLING DROP-OFF LOCATIONS

The Environmental Services Department has 48 recycling drop-off bin locations throughout the Solid Waste Management Area.

**Ash River Trail Solid Waste Canister Site** 11391 Ash River Trail. Open site hours.  
**Aurora City Garage**. Open limited hours.  
**Aurora Solid Waste Transfer Station**. 5910 Hwy 135. N. Open site hours.  
**Babbitt**. City Hall parking lot. Open 24 hours.  
**Balkan Township Solid Waste Canister Site**. 5524 Hwy 73 N. Open site hours.  
**Biwabik City Garage**. Open limited hours.  
**Biwabik Township Hall**. 6555 Oak Dr. Open 24 hours.  
**Bois Forte Fortune Bay Casino**. Open 24 hours.  
**Bois Forte Nett Lake Solid Waste Canister Site**. 12807 Palmquist Dr. Open site hours.  
**Brookston Solid Waste Transfer Station**. 8609 Hw. 2. Open site hours.  
**Buhl City Garage**. Open 24 hours.  
**Comstock Lake Solid Waste Canister Site**. 46499 Comstock Lake Rd. Open site hours.  
**Cook Solid Waste Transfer Station**. 2134 S. Beatty Rd. Open site hours.  
**Cotton Solid Waste Canister Site**. 84679 Hwy 53. Open site hours.  
**Dewey Lake Solid Waste Canister Site**. 6315 Dewey Lake Rd. Open site hours.  
**Elv.** Hwy 169 across from Ferrell Gas. Open limited hours.  
**Embarrass Solid Waste Canister site**. 7530 Koski Rd. Open site hours.  
**Eveleth**. 6 Fayal Rd. Open 24 hours.  
**Fayal Township Hall**. Open 24 hours.  
**French Solid Waste Canister Site**. 7150 Greenrock Rd., Side Lake. Open site hours.  
**Gilbert**. Lower Dakota Ave. Open 24 hours.  
**Great Scott North Solid Waste Canister Site**. 7075 Hwy 25. Open site hours.  
**Great Scott South Solid Waste Canister Site**. 9619 Bonner Rd. Open site hours.  
**Greenwood Township Hall**. Hwy 77. Open 24 hours.  
**Hibbing Recycling Center**. 1600 Plant Rd. Open limited hours  
**Hibbing Waste Water Treatment Plant**. Hwy 16 Open 24 hours.  
**Hovt Lakes Recycling Center**. Hwy 110. Open limited Hrs.  
**Kabetogama Solid Waste Canister Site**. 10150 Gamma Rd. Open site hours.  
**Kelly Lake City parking lot**. Open 24 hours.  
**Kinnev City Garage**. Open 24 hours.  
**Lavell Solid Waste Canister Site**. 3249 Hwy 25. Open site hours.  
**Makinen Solid Waste Canister Site**. 6327 Long Lake Rd. Open site hours.

**McKinley Main Street**. Open 24 hours.  
**Meadowlands Solid Waste Canister Site**. 7722 Pine Rd.  
**Mt. Iron**. South Slate St. Open 24 hours.  
**Northwoods Solid Waste Transfer Station**. 9384 Hwy 21 N. Open site hours.  
**Orr Solid Waste Canister Site**. 4038 Hwy 53. Open site hours.  
**Pike Town Hall**. Open 24 hours.  
**Portage Solid Waste Canister site**. 6992 Crane Lake Rd. Open site hours.  
**St. Louis County Regional Landfill**. East of Virginia off of Hwy 135. Open site hours.  
**Sandy Town Hall**. 7580 Hill Road. Open 24 hours.  
**Silica Township Fire Dept**. 1659 Hwy 73. Open 24 hours.  
**Soudan Solid Waste Canister Site**. 5160 Hwy 169. Open site hours.  
**Sparta Community Center**. Open 24 hours.  
**Sturgeon Solid Waste Canister Site**. 8380 Hwy 73 N. Open site hours.  
**Virginia Public Works Garage**. 15th Ave W. and 20th St. S. Open 24 hours.  
**West Eveleth Playground**. Open 24 hours.  
**White Township**. Hwy 100 S. of Aurora. Open limited hrs.  
**Wuori Township Hall**. 7449 Werner Rd. Open 24 hrs.

## THANKS FOR RECYCLING!

Thanks to you the recycling program in St. Louis County works! But we can still do better. Studies show that a high percentage of recyclable paper, plastic and aluminum are still being thrown into the garbage. Recycling in St. Louis County provides local jobs and revenue for our recycling programs and helps extend the life of our Regional Landfill.

St. Louis County Environmental Services Department  
Solid Waste Division

307 First St. S., Ste. 115  
Virginia, MN 55792

Phone: 749-9703  
1-800-450-9278  
Fax: 218-749-0650

[www.stlouiscounty.org/recycle](http://www.stlouiscounty.org/recycle)