



2014 Cook County Solid Waste Management Plan

Prepared for:

COOK COUNTY PLANNING AND ZONING OFFICE

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Cook County Integrated Solid Waste Management Plan 2014

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1.0 Executive Summary

1.1 INTRODUCTION

The 2013 Cook County Solid Waste Management Plan has been developed in accordance with the revised rules of the Minnesota Pollution Control Agency (MPCA) governing the development, adoption, and implementation of solid waste management plans (SWMPs) in Greater Minnesota. The MPCA adopted the revised rules, Minnesota Rules Chapter 9215.0500 – 0215.0880, in 2009, to reflect current solid waste management practices, eliminate rule requirements that were redundant or obsolete, encourage regional planning, and provide counties with more flexibility in choosing waste abatement strategies and integrated solid waste management systems that reflect the characteristics affecting solid waste systems in Greater Minnesota.

Cook County makes solid waste programs and services available to residents of and visitors to Cook County. This plan describes the demographics and geography of Cook County, the existing integrated management plan in Cook County in northeastern Minnesota, and presents policies and strategies to guide the County's solid waste management programs and planning over the next 10 years.

1.2 CURRENT SOLID WASTE SYSTEM

The current solid waste management system ensures that viable outlets for waste materials are available to the residents, visitors, and businesses of Cook County. There are adequate disposal and recycling facilities for Cook County waste. There are incentives for waste reduction, including volume-based hauling fees.

Disposal facilities serving Cook County include the North Shore Waste Transfer Station in Grand Marais, the Cook County Recycling Center in Grand Marais, the Tofte Transfer Station, the Western Lake Superior Sanitary District (WLSSD) Transfer Station in Duluth, and the Superior Moccasin Mike Sanitary Landfill in Superior, Wisconsin. There are five mobile recycling trailers throughout Cook County.

Cook County works with regional and local partners such as contracting with WLSSD for household hazardous waste (HHW) collection and management and participating in the Northeast Waste Advisory Council (NEWAC).

1.3 PROPOSED FUTURE INTEGRATED SOLID WASTE SYSTEM

The proposed integrated solid waste management system for Cook County relies on many of the successful programs that have already been established. Cook County intends to continue allowing local waste haulers to contract with regional partners for final disposal of Cook County solid waste.

Future programs will build on established waste abatement and source reduction policies, and Cook County intends to increase solid waste education programs to encourage proper management and disposal of County waste.

The integrated solid waste management system will continue to rely upon the Cook County Recycling Center in Grand Marais and on the Tofte Transfer Station to act as main hubs for solid waste management. Recycling will be encouraged with service to the mobile sites as well as the Recycling Center and Transfer Station, and recycling collection for Grand Marais residents will be explored. The yard waste collection sites will continue to operate. Cook County will evaluate the possible expansion of its yard waste composting site to include source-separated organics recycling. Another opportunity for increasing organics collection will be partnering with local and regional entities to take advantage of economy of scale.

Programs for management of problem materials such as tires, used appliances, and motor vehicle waste will continue. The Recycling Center will continue to be a depository for motor vehicle waste and cooperation and coordination with local private businesses such as appliance stores and motor vehicle service stations will continue.

The future proposed integrated solid waste management system will enable residents and businesses of Cook County to safely and responsibly manage solid waste in a reliable and cost-effective manner.

1.4 GOAL VOLUME TABLE

As shown in the goal volume table (Appendix A), Cook County currently generates approximately 5,000 tons per year of municipal solid waste. All Cook County solid waste that is not recycled is hauled to the WLSSD Transfer Station and subsequently to the Superior Moccasin Mike Sanitary Landfill in Superior, Wisconsin.

Over the 10-year planning period, Cook County anticipates increasing recycling from 25% in 2011 to over 31% by 2021. Through increased education regarding proper solid waste management and the impacts of on-site disposal, Cook County intends to reduce the population using on-site disposal methods and reduce the amount of problem materials not recycled.

Cook County is not located near any waste processing facilities, so all MSW that cannot be recycled is projected to be sent to landfills. The haulers that serve Cook County currently utilize the WLSSD Transfer Station and are projected to continue to do so.

1.5 BUDGET SUMMARY

Cook County Planning and Zoning has an annual total combined operational budget of approximately \$375,000. In 2011, the sources of these funds included HHW grants from MPCA, SCORE funding, solid waste disposal fees and taxes, license fees, and funds from the general fund. The budget is projected to remain steady at approximately \$325,000 for the planning period. The budget is included as Appendix B.

Of the total budget, nearly 80% is spent on recycling operations and contracted recycling services, 16% on staff and administration costs, and the remainder on HHW program costs, waste reduction and education, and yard waste composting. The budget amounts and spending categories are expected to remain fairly steady over the next 10 years.

2.0 Background Information

2.1 DEMOGRAPHIC INFORMATION

Cook County is located in northeastern Minnesota. Cook County has a land area of approximately 1,452 square miles, making it the twelfth largest county in the state. The County comprises the City of Grand Marais, Lutsen Township, Schroeder Township, Tofte Township, unorganized Cook County, and the Grand Portage Indian Reservation.

The Cook County seat is in Grand Marais, which is approximately 260 miles north-northeast of the Twin Cities metropolitan area, as shown on Figure 1.

Based on 2013 Minnesota State Demographic Center estimated information, Cook County is home to 5,190 people, an increase of 0.3% over the 2010 estimate of 5,176 people. There are approximately 2,514 households in Cook County with an average of 2.06 persons per household.

Cook County has a seasonal population. Visitors and seasonal inhabitants increase the population of Cook County two- to five-fold in the summer months, which presents opportunities and challenges for the stable population base. The Cook County integrated solid waste management system must accommodate both permanent residents and seasonal tourists, including those with a second home in Cook County.

2.1.1 Current Population Distribution

The majority of Cook County is sparsely populated. The 2012 population density is estimated to be 3.6 persons per square mile. The city and townships have a combined population of 2,241, which is 43% of the County population. The City of Grand Marais has a population of 1,355.

Table 2-1 shows the population levels from the years 2000, 2010, 2011 and 2012 taken from Census data and Table 2-2 shows the current projections for the years 2013 – 2023.

Table 2-1: Cook County Population 2000 – 2012

	2000	2010	2011	2012	Change 2000-2012
Population	5,168	5,176	5,216	5,190	0.43%
Households	2,350	2,494	2,521	2,514	7.0%

2.1.2 Population Projections 2013-2023

Population projections for Cook County do not change significantly. Based on population estimates from the Minnesota State Demographic Center, the following table shows the population projections from 2013-2023.

Table 2-2: Cook County Population Projections 2013 – 2023

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
5,326	5,377	5,429	5,463	5,498	5,533	5,568	5,603	5,631	5,658	5,686

County population projections estimate that Cook County population will increase gradually for the next ten years.

2.1.3 Current and Projected Land Use Patterns

The land use within the county is largely residential or undeveloped. Land use is not expected to change significantly in the ten-year planning period of the Solid Waste Management Plan. Cook County has an online interactive geographic information system (GIS). Cook County Land Use is shown in Figure 2 (attached). The Land Use Guide Plan for Cook County, Minnesota was adopted May 21, 1997 and is generally still accurate, though the County is currently updating land use and zoning for the townships. The majority of the county is rural. Land uses consist of cities and townships, the Grand Portage Reservation, lakes, rivers, and forested land. The Superior National Forest and Boundary Waters Canoe Area Wilderness are located within Cook County.

Cook County abides by the County Ordinances, including the Cook County Zoning Ordinance as amended and updated November 22, 2011, Cook County Subdivision Ordinance as amended May 22, 2012, and the Airport Zoning Ordinance.

Approximately 90% of Cook County is publicly owned, so the development of the 10% of private land is significant and highly visible. The majority of the intensive development in Cook County is for residential, resort, second home, and commercial uses.

2.2 COOK COUNTY GEOGRAPHY

Cook County has many natural resources, including Lake Superior, vast forested tracts, inland lakes and streams with limited development, and diverse populations of plant and animal communities. Cook County is part of Minnesota's coniferous forest biome. The Continental Divide separates Cook County into the Rainy Lake watershed which drains into the Hudson Bay and the Lake Superior watershed which ultimately drains into the Atlantic Ocean. Both inland and coastal wetlands can be found in Cook County.

2.3 COOK COUNTY ECONOMY AND ECONOMIC CONDITIONS

2.3.1 Current and Projected Employment and Wages

The State Demography Center in the 2007 publication *Minnesota Labor Force Projections 2005-2035* indicates that Cook County is likely to see a decline in the labor force from 2005-2035. The projections are included in the table below.

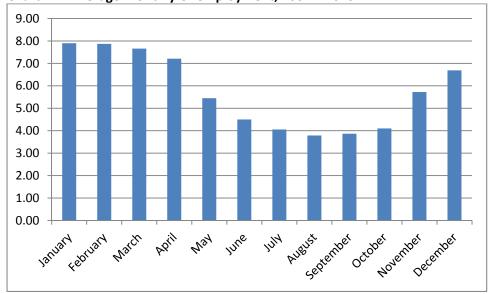
Table 2-3: Cook County Labor Force Projections 2005-2025

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								Change 2005-	Change 2005-
Age	2005	2010	2015	2020	2025	2030	2035	2015	2035
16 to 24	380	300	300	270	270	270	270	-21.1%	-28.9%
25 to 44	1,150	1,070	990	940	920	860	830	-13.9%	-27.8%
45 to 64	1,370	1,530	1,580	1,590	1,510	1,440	1,410	15.3%	2.9%
65+	160	220	300	400	480	510	520	87.5%	225%
Total	3,060	3,130	3,170	3,200	3,180	3,080	3,030	3.6%	-1%

The per capita income according to Census data was \$30,501 and per household income was \$49,496, based on data from 2007-2011. The household income for Cook County was approximately 85% of the Minnesota average household income of \$58,476. Based on 2007-2011 data, 9.1% of Cook County residents were considered below poverty level, compared to 11.0% statewide.

For calendar year 2012, Cook County had low unemployment of 4-9%. The Positively Minnesota website of the Minnesota Department of Employment and Economic Development has county-level unemployment data, which estimate the June 2013 unemployment rate for Cook County at 4.8%. The June 2012 unemployment rate was 5.0%. There is a strong seasonal effect to employment trends; unemployment is highest in the winter and spring and lowest in the summer. Average monthly unemployment from January 2004 through June 2013 is shown in the chart below.

Chart 2-1: Average Monthly Unemployment, 2004 – 2013



Annual employment levels from 2002-2012 are shown in the Chart 2-2. The data show a high of 2,804 people employed in 2005 and a low of 2,600 in 2009. The average estimate from 2002-2012 is 2,708.

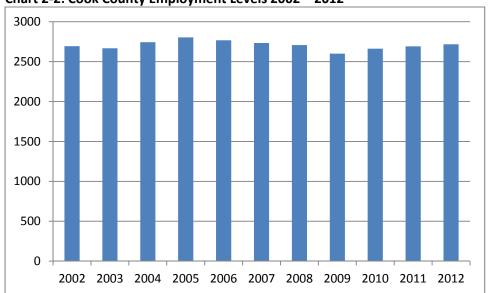


Chart 2-2: Cook County Employment Levels 2002 – 2012

2.3.2 **Local Economic Conditions**

According to the Land Use Guide Plan, Cook County's employment is largely based upon natural resources, especially tourism and timber. Major industries are forestry, winter and summer recreation, services, government, retail and wholesale trade, manufacturing, finance, construction, transportation, insurance, and real estate. Major Cook County employers are listed in the table below.

Table 2-4: Maj	or Employe	ers in Cook	County, 1997

Industry	Average Monthly Employment
Services	1,184
Government	555
Trade, Wholesale & Retail	518
Manufacturing	108
Finance, Insurance & Real Estate	61
Construction	57
Transportation, Communication & Utilities	42
Total	2,525

2.4 **SUMMARY**

Cook County is a rural county, which is home to approximately 5,190 residents and will likely experience slow population growth. The largest population center is the City of Grand Marais, but there are large unincorporated areas of the County. The population density is very low at 3.6 persons per square mile, which makes participation and cost effectiveness of waste management a challenge. The population projections show that the county population will increase approximately 7% from 2013-2023. The labor

force in Cook County will shift as the population ages and the total labor force will remain fairly steady through 2025. Employment levels have been fairly steady and have been improving in Cook County, though reflect the seasonal nature of the County. These predictable seasonal variations and stable permanent population are beneficial for solid waste management planning and accommodating the seasonal visitors within the county. Cook County will continue managing its integrated solid waste system to meet the challenges and take advantage of the opportunities in the county.

3.0 Solid Waste Collection and Generation

3.1 EXISTING SOLID WASTE COLLECTION

Cook County solid waste collection is handled by private haulers licensed by the County. Recently, the solid waste collection has been fluctuating as some haulers no longer collect Cook County waste and others have been licensed and collecting waste. The waste boundaries have shifted. Generally, there is waste collection for the City of Grand Marais and the Townships of Lutsen, Tofte, and Schroeder, as well as along the major transportation corridors of Highway 61 and the Sawbill, Caribou, Gunflint, and Arrowhead Trails.

Cook County currently manages its solid waste in an integrated solid waste management system. Cook County has relationships with nearby counties Aitkin, Carlton, Itasca, Koochiching, Lake, St. Louis, and the Western Lake Superior Sanitary District (WLSSD) to make solid waste programs and services available to residents of northeastern Minnesota. These counties form the Northeast Waste Advisory Council (NEWAC) and meet regularly to discuss solid waste management issues relevant to the counties.

Minnesota Solid Waste Planning Rules Chapter 9215 requires each county to maintain and implement a solid waste management plan that has been approved by the MPCA. Solid waste planning helps develop a system that recycles materials, conserves and recovers resources, and manages yard waste, problem materials, and construction and demolition debris. Cook County's last update to its solid waste management plan (SWMP) was approved in May 2001, which included information through calendar year 1998. Since that time, the MPCA has provided both a 2-year and 5-year extension to SWMPs, and then passed enabling legislation to extend SWMP's effective dates for 10 years. This is the next plan to describe solid waste management programs for the next 10 years within Cook County.

Cook County adopted a Public Health Code in 1979 that contains provisions of the County's Solid Waste Ordinance. When necessary, the Cook County Board of Commissioners will review the Solid Waste Ordinance and make necessary changes or updates.

3.1.1 Facilities

Cook County does not own nor operate waste management facilities as part of its integrated waste management system. The only solid waste disposal facility within Cook County is the Minnesota Power Taconite Harbor Energy Industrial Waste Disposal Area (SW-503), a private landfill not open to the public. In 2012, this facility accepted approximately 22,178 cy of industrial solid waste in its landfill.

Cook County Recycling Center, Grand Marais, and Tofte Transfer Station, Tofte

There is a Recycling Center in Grand Marais and a transfer station and recycling collection location in Tofte, both open year-round. From September 15 to May 15, the Tofte Transfer Station is open two days per week. Household hazardous waste (HHW) and problem materials are collected at these recycling

centers. Cook County has community collection sites throughout rural Cook County, as shown on Figure 3.

Brush and tree waste is accepted at various sites throughout Cook County. Clean brush, limbs, branches, un-bagged grass clippings, un-bagged leaves, and garden waste are accepted at the Cross River Pit, Big Bay Point Pit, Ball Club Road Pit, Pike Lake Pit, and Caribou Lake Pit without a permit. A permit is required for the material to be disposed at the East Bearskin Pit. Hours of operation and directions to each site are available on the Cook County website (see attached Figure 4).

The Cook County Sanitary Landfill (SW-294) was closed on March 31, 1999 and has entered MPCA's Closed Landfill Program. The landfill is lined, has a 4-foot final cover, a passive gas system and a leachate collection system.

The Gunflint Transfer Station has been sold and is no longer used for the collection and consolidated hauling of MSW.

Private haulers contract with WLSSD. Solid waste is mostly transferred through the WLSSD and disposed of at the Superior Moccasin Mike solid waste disposal facility (WDNR license number 2627) in Superior, Wisconsin.

Western Lake Superior Sanitary District Transfer Station, Duluth

The WLSSD is a special purpose unit of government that was created by the Minnesota State Legislature in 1971 to address pollution issues in the Lower St. Louis River Basin. It is governed by a nine-member citizen's board of directors. The WLSSD has been responsible for a 530 square mile area as a Regional Solid Waste Authority since 1974. Cook County is part of the WLSSD expanded solid waste service area.

The WLSSD transfer station was permitted on May 5, 1999, and is located in the Lincoln Park neighborhood in Duluth. The transfer station is owned by WLSSD and is operated by Gibson Transfer, Inc. Approximately 120,000 tons of waste passes through WLSSD's transfer station each year from the entire extended service area.

The Transfer Station receives MSW and mixed waste from local licensed waste haulers. The MSW predominantly includes food wastes, containers and product packaging, and miscellaneous inorganic wastes from residential, commercial, institutional, and industrial sources. Mixed waste is acceptable waste that requires extraordinary methods to achieve compaction. It includes furniture and non-hazardous construction and demolition (C&D) debris.

Superior Moccasin Mike Sanitary Landfill, Superior, WI

Waste delivered to the WLSSD Transfer Station is taken to the solid waste landfill in Superior, Wisconsin. The landfill is also known as the Moccasin Mike Landfill and has a capacity of 1,581,949 cy. In 2012, the Superior Landfill accepted 111,015 tons of MSW. Additional waste accepted included 880 tons of foundry waste, 3,675 tons of POTW sludges, and 1,694 tons of other solid waste. Approximately 35,538 tons of waste were exempt from solid waste fees and were used for dikes and berms. Alternate daily cover waste was composed of 17,874 tons of high-volume industrial waste and another 3,363 tons of treated contaminated soil. The landfill accepted 3,446 tons of C&D waste and 416 tons of miscellaneous waste, for a total of 177,901 tons of waste collected in 2012. Approximately 113,380 tons of waste originated in Minnesota. The estimated site life is 99 years given the room available for expansion.

North Shore Waste Transfer Station, Grand Marais

North Shore Waste operates a transfer station in Grand Marais. The Transfer Station accepts household garbage, electronics, tires, and construction material. Services for paint, stain, oil, fuel, fluorescent bulbs, and other hazardous waste are not provided by the North Shore Waste Transfer Station. The Transfer Station operates from 10 am to 5 pm Monday through Friday and 10 am to 2 pm on Saturdays. It provides seasonal residents and visitors a location for dropping off waste.

Cook County Recycling Center, Grand Marais

The Cook County Recycling Center is located in Grand Marais and is highly visible and accessible to residents and visitors. The Center was built in 1987 with a total building area of 2,880 square feet. The Recycling Center was expanded in 1995 to a total of over 6,000 square feet. Individuals and businesses directly drop off material at the Center with the exception of the trailers brought in from the rural drop-off centers. The Cook County Recycling Center breaks glass and bales cardboard, magazines, newspapers, and mixed paper, aluminum, steel and tin cans, plastic, and crushed oil filters. Motor oil is collected and placed in a storage tank. Household items are placed for sale in the Budget Shop or baled for sale.

The Budget Shop is a co-located used clothing and household goods sales area. Shoppers come in to the Budget Shop and see the recycling operations and vice versa, which can increase participation in both programs. The Budget Shop and Recycling Center programs are complementary and contribute to the success of Cook County's integrated solid waste management system.

3.1.2 Collection Services and Rates

Cook County solid waste is collected by private haulers who are licensed by the County. Waste is hauled to WLSSD in Duluth. There are currently two licensed MSW haulers: North Shore Waste and Nelson's Machine Products. Prior to 2013, Pederson's Disposal served Cook County. In 2012, Pederson's Disposal collected approximately 2,108 tons of MSW, or 58% of Cook County's MSW, and Nelson's Machine Products collected 1,528 tons, or the remaining 42% of waste.

In Cook County, Pederson's Disposal and Nelson's Machine Products also collect and haul C&D waste. In 2012, Pederson's Disposal took packer trucks directly to Duluth, so estimated amounts were not available. Nelson's Machine Products collected approximately 754 tons of C&D waste in 2012.

Nelson Machine Products is based in Tofte and serves an area extending from Cascade to the Lake County border. North Shore Waste is based in Grand Marais and primarily serves from the City of Grand Marais east to Grand Portage. North Shore Waste provides weekly residential services, weekly, biweekly, or monthly commercial service, provides construction dumpsters.

Residential hauling fees can range from \$20-50 per month, depending on location, hauler, and size of container. Commercial hauling fees are volume-based and range from \$15-30 per cubic yard. There is no Cook County solid waste assessment fee. The WLSSD Transfer Station Fee was \$50.36 per ton, applicable from July 1, 2012, through June 30, 2013, for out-of-district haulers such as those from Cook County.

Recycling is available at a central drop-off and processing facility in Grand Marais and five rural drop-off centers. The rural drop-off centers are located in Tofte, Lutsen, Grand Portage, and two sites along the Gunflint Trail. The Tofte facility serves the western portion of Cook County and is open on Tuesdays,

Thursdays, and Saturdays in the summer and Tuesdays and Saturdays in the winter. The Lutsen site is located the Lutsen Mountain ski area and, due to the seasonal nature of tourism to Lutsen, is most active in the winter. The Grand Portage facility serves the Grand Portage community and is managed by the Grand Portage Reservation Tribal Council; the majority of recycling at the Grand Portage site is collected during the summer months.

3.1.3 Storage and Final Disposal Systems

The majority of Cook County waste is collected and managed through the WLSSD Transfer Station. The integrated waste management system in place encourages materials to be received at the appropriate solid waste facilities where it can be managed properly and reduce illegal disposal. Other materials are encouraged to be removed from the MSW stream prior to receipt at the Transfer Station. Materials such as recyclable items, yard waste, demolition debris, appliances, tires, HHW, fluorescent bulbs/ballasts and electronic wastes all have alternative collection and reuse, recycle, or disposal systems in place.

3.2 EXISTING SOLID WASTE GENERATION

3.2.1 Solid Waste Generation Rate

In 2011, Cook County generated 4,990 tons of municipal solid waste (MSW). Based on a population of 5,226 residents, the per capita solid waste generation rate was 0.95 tons, or 1,909 pounds, of waste generated per person in a year. Of this waste, 24.6% was recycled, and 72.4% was disposed of at the Superior Moccasin Mike Landfill. These values are consistent with the past five years of Cook County solid waste generation. From 2006-2010, waste amounts generated within the county varied only slightly, from a high of 6,504 tons of MSW generated in 2008 to a low of 5,394 tons generated in 2009. As with the rest of the state of Minnesota, MSW generation rates are linked to the economy. Generation of MSW had been increasing until 2008 as the recession affected waste generation.

Of Cook County waste, approximately 70% is residential and 30% is commercial/industrial/institutional waste. An estimated 1.4% of the population is operates outside the integrated solid waste management system and disposes of waste on-site, for a total estimated disposal amount of 29 tons. An additional 129 tons of problem materials, such as tires, motor oil and oil filters, were estimated not to be collected in Cook County.

3.2.2 Solid Waste Characteristics

The waste stream in Cook County consists almost entirely of household and commercial waste as there are few industrial operations in the County. The composition of Cook County waste is estimated from Minnesota solid waste composition studies performed by MPCA. The waste can be considered characteristic of the County's waste as the samples taken for the waste sort were carefully controlled to provide a snapshot of Greater Minnesota's waste. The summary of Greater Minnesota aggregate composition waste is included below, along with the mean waste composition of Metropolitan-area waste. This represents both residential and commercial/industrial/institutional waste.

Table 3-1: Approximate Cook County Waste Composition

Category	Mean Composition	Comparison to Metropolitan Mean Composition
Paper	34.2%	34.2%
Plastic	11.7%	11.0%
Metals	6.0%	4.4%
Glass	3.0%	2.7%
Organic Materials	22.9%	27.3%
Problem Materials	2.0%	1.8%
HHW/HW	1.0%	0.3%
Other Waste	19.1%	18.3%
Total	100%	100%

Taken from Summary Table 4-9 of the Statewide MSW Composition Study: A Study of Discards in the State of Minnesota (2000).

3.2.3 Regional Challenges and Opportunities

There are many opportunities for cooperation among counties in northeastern Minnesota. Cook County is actively involved in the NEWAC and interacts often with WLSSD on the management of Cook County solid waste.

A challenge for Cook County solid waste is covering the vast sparsely populated land area and providing services to Cook County residents. There are programs that Cook County would like to implement, but without a stable large waste supply, the logistics are economically infeasible. Cook County will continue to cooperate with its regional partners to overcome this challenge.

3.2.4 Construction and Demolition Debris

Construction and demolition (C&D) debris is accepted at North Shore Transfer Station. In 2012, 754 tons of C&D were collected and hauled to the WLSSD Transfer Station. Most private and public demolition landfills within Cook County have closed.

3.2.5 Major Solid Waste Generators

The majority of Cook County solid waste is from residential sources, as the main Cook County industry is tourism. The service industry, specifically resorts catering to the seasonal tourists, represents the largest generators of waste in Cook County.

Table 3-2: Major Cook County Waste Generators

Business Name	Location	Major Waste Type	Materials Recycled
Lutsen Village Inn	Lutsen	Mixed MSW	Paper, Plastic, Newspaper, Glass, Aluminum, Cardboard
			· ·
Bluefin Bay Resort	Tofte	Mixed MSW	Paper, Plastic, Newspaper, Glass,
			Aluminum, Cardboard
Independent School	Grand Marais	Mixed MSW	Paper, Plastic, Newspaper, Glass,
District #166			Aluminum, Cardboard

Business Name	Location	Major Waste Type	Materials Recycled
Cook County	Grand Marais	Mixed MSW	Paper, Plastic, Newspaper, Glass,
Courthouse and			Aluminum, Cardboard
Government Buildings			
Cook County North	Grand Marais	Mixed MSW and	Paper, Plastic, Newspaper, Glass,
Shore Hospital		Medical Waste	Aluminum, Cardboard

3.3 LOCAL AND REGIONAL SOLID WASTE PLANNING WITHIN LAST FIVE YEARS

The integrated solid waste management system operating in Cook County is well established. The Cook County recycling program has been operational for 24 years. Cook County continues to maintain its longstanding partnership with the NEWAC region. Cook County is also involved with WLSSD as most MSW is transferred through the Duluth transfer station. Possible new partners for solid waste cooperation include neighboring counties, large cities, and/or tribal entities.

Locally, Cook County has focused on increasing recycling through the visible and accessible Cook County Recycling Center. The Budget Shop was an initiative to bring more people into the recycling center and increase awareness for recycling. The project has been a success as it sold more than 54,085 items in 2012 and brought in \$27,042.25 in revenue. Recycling rates have been increasing and reached 25.7% in 2012. Changes to SCORE legislation in 2012 removed the yard waste credits that had added zero to five percentage points and the source reduction credits that had added zero to three percentage points to a county's recycling rate.

Locally, Cook County has continued educational programs to reduce waste generation, encourage recycling and responsible handling of hazardous wastes, and introduce children to solid waste issues.

Multiple solid waste regional meetings are held within the Solid Waste Administrator's Association (SWAA) District 1 geographic area, which serves northeastern Minnesota. This is a forum for these northeastern Minnesota counties to discuss issues of concern, update each other on progress made with regard to legislative or policy issues related to solid waste, and share ideas and collaborate on projects. These meetings occur between meetings of the full SWAA, where similar discussions are held at a state level.

3.4 SUMMARY

Solid waste collection and generation has remained steady in Cook County. Cook County has a rural population that cannot easily be required to participate in curbside recycling or waste collection, but collection areas encourage proper management of solid waste. The County owns the Tofte Transfer Station, manages the Cook County Recycling Center, and licenses solid waste haulers. Cook County works with regional counties and communities on solid waste initiatives, as both a support of its existing partnerships and to expand upon its evolving integrated waste management system.

4.0 Existing Integrated Solid Waste Management System

4.1 POLICY AND GOALS

Cook County Solid Waste plans and manages the waste streams within Cook County. This is done through working with disposal facilities and end markets to ensure that viable outlets for waste materials are available to the residents of Cook County. Cook County Solid Waste is charged with implementing, applying, and enforcing the rules and regulations found within the Cook County Solid Waste Ordinance and those mandated by State or Federal law. Cook County's Solid Waste Ordinance is applied county-wide to provide for safe, legal, and proper management of solid waste materials.

4.2 HISTORY OF SOLID WASTE SYSTEM DEVELOPMENT

Cook County has successfully managed its solid waste since 1988. Cook County provides a solid waste management programs and services to be utilized by its citizens and cooperates with nearby counties to provide additional resources and services when possible. Through careful cooperative planning, Cook County hopes to continue successfully managing solid waste.

Cook County adopted a Solid Waste Ordinance as part of its Public Health Code on February 27, 1979. Chapter 2 of the Public Health Code deals with solid waste, including its storage, transportation, and disposal; licensing collectors and haulers; and regulations for sanitary landfill sites.

4.3 EXISTING WASTE REDUCTION PROGRAMS

Tourism is the main industry and is greatly affected by the economy and the weather. The years of the Great Recession saw waste reduction in the County as the tourism industry suffered and the local economy declined. The summer and winter seasons attract the largest number of visitors to Cook County, followed by the autumn when people visit during peak foliage.

The Minnesota Waste Management Hierarchy (Minn. Stat. §115A.02b) gives highest preference for waste reduction and reuse and Cook County encourages waste reduction in a variety of ways. Cook County educates its residents in order to encourage waste reduction efforts. The Budget Shop, a county resale operation, is a way to donate unwanted usable items and to buy used items and reduce packaging and production waste.

Cook County will continue to support efforts made by MPCA and other agencies to reduce waste generated by businesses and residents. Cook County's role may be to answer questions, hand out literature, make presentations to businesses or civic groups, or advertise at Grand Marais festivals.

4.4 EXISTING SOLID WASTE EDUCATION PROGRAMS

Educating the public is Cook County's preferred method of gaining and maintaining public support and involvement in solid waste programs, projects, and activities. Educational information is available on the Cook County website to educate residents on the proper disposal various types of waste and the locations and hours for various solid waste program centers. Information specific to handling of hazardous waste (HHW), appliances and white goods, electronic waste (e-waste), tires, yard waste and compost, used oil and oil filters, fluorescent lights, auto and marine batteries, and scrap metal is available upon request and published when a collection date approaches. Written material such as brochures and pamphlets are available upon request.

4.5 EXISTING RECYCLING PROGRAMS

Recycling information for Cook County is available on its website. The Recycling Center in Grand Marais is the largest drop-off site for recyclables. It also houses the Budget Shop for sale of usable items, which is the highest level of solid waste management in the waste hierarchy (Minnesota Statutes 115A.02 (b)(1)). Other recycling collection sites within Cook County include the Tofte Transfer Station and community collection sites in Grand Portage, Lutsen Mountain, Windigo Lodge, and Voyager Outfitters, as shown on Figure 3.

Glass, plastic containers, aluminum cans and aluminum foil, steel/tin cans, magazines, mixed/office paper, newspaper, cardboard, used oil and oil filters, and lead acid batteries are accepted for recycling in Cook County. In 2011, Cook County recovered 1,227 tons of materials for recycling, recording a 25% recycling rate.

Table 4-1 illustrates the type, amount, and percent of each recyclable collected and processed by the County from 2007 through 2011. Total recycling decreased from 2007-2011 as paper and metal recycling has decreased. Glass recycling has increased while plastics recycling has been stable. There is no organics recycling available in Cook County, mainly due to a low quantity being available that makes collection and transportation economically prohibitive.

Table 4-1. Cook Coulty Recycling Collibosition, 2007-201	Table 4-1: Cook County	v Recycling Com	position, 2007-2011
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Material	2007		2008		2009		2010		2011	
Paper	818	55%	744	56%	693	57%	698	58%	655	53%
Metal	334	22%	209	16%	150	12%	152	13%	158	13%
Glass	173	12%	215	16%	201	17%	219	18%	276	22%
Plastic	47	3%	47	4%	46	4%	44	4%	47	4%
Organic	0	0%	0	0%	0	0%	0	0%	0	0%
Textiles	37	2%	33	2%	37	3%	0	0%	0	0%
Problem										
Materials	89	6%	90	7%	89	7%	90	7%	92	7%
Total	_									
Recycling	1498		1338		1216		1203		1228	

Residents of Cook County are encouraged to manage their yard waste through backyard compost piles or by using a mulching lawnmower. Lawn clippings may be brought to the Cook County Recycling Center

for composting. Brush and tree waste is also accepted at various disposal sites across the County (see Section 3.1.1). Changes to SCORE legislation in 2012 removed the yard waste credits that had added zero to five percentage points to a county's recycling rate. While yard waste tonnage does not need to be reported or included in recycling amounts, Cook County will continue to manage yard, brush, and tree waste.

4.6 **EXISTING HOUSEHOLD HAZARDOUS WASTE MANAGEMENT**

It is the goal and policy of Cook County to encourage residents to reduce the amount of household hazardous waste (HHW) they generate to understand proper disposal methods. Cook County provides its residents with semi-annual HHW collection events. Cook County also assists businesses with a Very Small Quantity Generator (VSQG) program, where universal wastes, sharps, and one-time cleanouts are accepted. Universal waste includes fluorescent lamps, pesticides, batteries, and mercury-containing equipment. Cook County contracts with WLSSD for HHW and VSQG collection services.

Table 4-2 illustrates the type, amount and percent of each problem material collected in Cook County from 2007 through 2011. Appliances, used oil, tires, and vehicle batteries represent the largest tonnage of problem materials collected. The collected tonnages of problem materials with established programs are likely to remain stable for the foreseeable future. There is opportunity to increase the collection of problem materials in Cook County, especially electronics since they are prohibited from being landfilled under Minnesota Statutes 115A.9565.

Table 4-2: Tons of Problem Materials Collected, 2007-2011

Material	2007		2008		2009		2010		2011	
Antifreeze	0	0%	0	0%	0	0%	0	0%	0	0%
Appliances	32	36%	33	37%	33	37%	33	40%	31	34%
Electronics	0	0%	0	0%	0	0%	0	0%	0	0%
Florescent										
& HD										
Lamps	0	0%	0	0%	0	0%	0	0%	0	0%
HHW	0	0%	0	0%	0	0%	0	0%	0	0%
Latex										
Paint	0	0%	0	0%	0	0%	0	0%	0	0%
Oil Filters	3	3%	3	3%	3	3%	3	4%	2	2%
Tires	11	12%	11	12%	11	12%	11	13%	10	11%
Used Oil	10	11%	10	11%	9	10%	3	4%	15	17%
Vehicle										
Batteries	33	37%	33	37%	33	37%	32	39%	32	36%
Total										
Problem										
Materials	89		90		89		82		90	

4.7 **EXISTING RESOURCE RECOVERY PROGRAMS**

Cook County is not involved in any resource recovery programs.

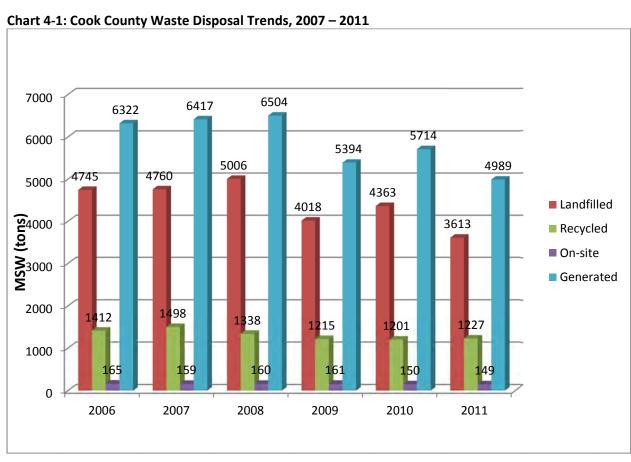
4.8 EXISTING LAND DISPOSAL FACILITIES

As described in Section 3.1.1, solid waste from Cook County is transferred through WLSSD to the Superior Moccasin Mike Landfill in Superior, Wisconsin. In 2011, the County landfilled 72.4% of its MSW or 3,613 tons.

Table 4-3 and Chart 4-1 illustrates Cook County's waste generation, recycling, and disposal methods from 2007 through 2011.

Table 4-3: Cook County Waste Generation, Recycling, and Disposal 2007-2011

Material	2007		2008		2009		2010		2011	
Landfill	4,760	74%	5,006	77%	4,018	74%	4,363	76%	3613	72%
Recycling	1,498	23%	1,338	21%	1,215	23%	1,201	21%	1227	25%
On-site	159	2%	160	2%	161	3%	150	3%	149	3%
Total Generated	6,417		6,504		5,394		5,714		4,989	



4.9 SOLID WASTE ORDINANCE AND LICENSING

Cook County Solid Waste is charged with implementing, applying, and enforcing the rules and regulations found within the Cook County Public Health Code and those mandated by State or Federal law. The Public Health Code authorizes, provides standards for, and regulates solid waste management

and licensing in Cook County. It requires that haulers and waste collectors apply for and receive a license from the County board. The Public Health Code serves as the solid waste ordinance for the County. The Public Health Code adopts the standards and requirements established by regulations of the MPCA for the management of solid waste.

Licenses have been granted to two haulers to collect residential and commercial solid waste within Cook County. The licenses for collection and transportation of solid waste require that the licensee meet appropriate equipment, operating, maintenance, labeling, storage, and other safety requirements. The Public Health Code also details requirements for the establishment, operation and maintenance of land disposal facilities as well as site closure requirements. The Public Health Code is appended to this Plan (see Appendix A).

4.10 COSTS TO OPERATE AND MAINTAIN THE SOLID WASTE MANAGEMENT SYSTEM

Cook County Planning and Zoning has an annual total combined operational budget of approximately \$375,000. In 2011, the sources of these funds included HHW grants from MPCA, SCORE funding, solid waste disposal fees and taxes, license fees, and funds from the general fund. The budget is projected to remain steady at approximately \$325,000 for the planning period. The budget is included as Appendix B.

Cook County reported a County allotment of \$228,422 for solid waste management in 2011. In addition, Cook County received \$55,950 in SCORE pass-through funds, \$2,346 in HHW funding, and \$38,660 from material sales. The total revenue for Cook County in 2011 was \$325,378.

The Cook County solid waste expenditures were \$239,633 for planning and administration, \$73,322 for recycling, and \$11,753 for HHW and problem materials management. Cook County also spent \$671 on educational programs.

Of the total budget, nearly 80% is spent on recycling operations and contracted recycling services, 16% on staff and administration costs, and the remainder on HHW program costs, waste reduction and education, and yard waste composting. The budget amounts and spending categories are expected to remain fairly steady over the next 10 years.

4.11 ACHIEVEMENTS, OPPORTUNITIES, AND CHALLENGES

The Cook County integrated waste management system has had many achievements. The Budget Shop is a successful endeavor that encourages and supports the reuse of materials to keep them out of the solid waste disposal system. There are licensed haulers providing residential and commercial service to Cook County businesses and residents. The yard waste collection system is effective, and the partnership with nearby counties to manage HHW has been successful.

A challenge in Cook County solid waste management is the rural nature of the County and its relatively large land area. There are major points of collection in Grand Marais and Tofte, but it is a challenge to further reduce on-site disposal of MSW and find new waste to incorporate into the solid waste management system to take advantage of economies of scale. An example of this challenge is providing curbside recycling pickup in Cook County. There is an opportunity to work with the new local waste hauler to support curbside recycling in Grand Marais.

There are opportunities to expand solid waste education in the County by increasing public information, education, and awareness programs. There is an opportunity to evaluate whether it is economically feasible to develop a source-separated organics composting program, or to collaborate with nearby counties to collect organics. The Cook County integrated solid waste management program will build on its past achievements and take advantage of new opportunities to meet any challenges it faces.

5.0 Proposed Integrated Solid Waste Management System

5.1 INTRODUCTION

Cook County intends to continue supervising County and regional solid waste through its integrated solid waste management system. The integrated solid waste management system has been operating for many years and is established; as such, waste generation and collection is projected to remain fairly steady. The proposed integrated solid waste management system would assure the long-term sustainability of Cook County solid waste management for its constituents and residents and businesses across northeastern Minnesota.

5.1.1 Policy

The Cook County Planning and Zoning Office Solid Waste implements, applies, and enforces the rules and regulations found within the Cook County Public Health Code and those mandated by State and Federal law.

5.1.2 Goals

Through working with disposal facilities and end markets, Cook County aims to ensure that viable outlets for waste materials are available to the residents of Cook County. Over the ten-year planning period described in this Plan, Cook County aims to expand its programs in order to continue to provide northeastern Minnesota residents and businesses with environmentally responsible, reliable, sustainable, convenient, and cost effective solid waste management services. Cook County has specific goals to increase levels of public information, education, and awareness, to work with waste haulers and support efforts for curbside recycling in Grand Marais, to evaluate the expansion of the yard waste composting site, to meet with local and regional groups to evaluate the possibility of a local source separated organics composting site, and to follow up on enhanced recycling efforts for electronics (e-waste).

5.2 WASTE ABATEMENT PROGRAMS

Cook County's integrated solid waste management programs include waste abatement programs. Cook County promotes source reduction and recycling programs within the County. In addition to waste reduction information and promotions, Cook County has educational materials for the public and programs to encourage recycling, yard waste management, tire management, motor vehicle waste management, and proper disposal for used appliances, household hazardous waste, construction and demolition debris, electronics and fluorescent bulbs, pesticides containers, organics, and other materials.

5.2.1 Waste Reduction

Cook County will continue its waste reduction programs to encourage residents and businesses to manage their solid waste and keep it out of the waste stream. There is an economic incentive for non-residential units to reduce waste through the volume-based commercial hauling fees. The system of allowing hauling companies to set collection rates will continue for the foreseeable planning future. Projections for MSW source reduction are difficult to estimate. The County plans for the generation of solid waste in the County to mirror population projections. As discussed in Chapter 2, the population of Cook County is projected to rise gradually over the next ten years; accordingly, solid waste generation is projected to also increase.

No new programs have been specified for development within the next ten years. No specific staff time or budget has been dedicated to the management of new programs for waste reduction within Cook County.

5.2.2 Waste Education

Cook County plans to increase its solid waste education programs to encourage proper management and disposal of County waste. By educating the public, Cook County gains and maintains public support and involvement in solid waste programs, projects, and activities. Cook County's proposed solid waste management system involves online education. Proper waste management and waste disposal information may be found on the Cook County website, along with relevant addresses and phone numbers. Cook County staff developed flyers and informational handouts for placement in various local businesses and will continue to provide material upon request. Cook County's participation at Grand Marais festivals will continue, as will participation in local talk radio promotional campaigns to encourage recycling and proper solid waste management.

Each year, Cook County will submit SCORE data to the State as part of the data tracking and reporting system on waste management efforts. In accordance with Minnesota Statutes 115A.552 Subdivision 3(a), a promotional program to publish notices at least once every three months and encourages source separation of residential, commercial, industrial, and institutional materials.

The budget for solid waste education is expected to remain steady over the next ten years as the integrated solid waste system becomes more established and understood in the County.

5.2.3 Recycling

The goal of Cook County recycling is to recover usable materials and reduce total waste that needs to be disposed of land disposal. Over the next ten years, recycling is projected to increase from approximately 25% of total waste generated in 2011 to over 31% by 2021.

Cook County will investigate opportunities to increase the amount of Cook County waste that is recycled. One potential option would be encourage curbside recycling in Cook County's one city of Grand Marais and take advantage of the greatest population density. As with solid waste hauling, the local hauling companies would be responsible for the establishment of the curbside recycling program.

Cook County owns and operates a regional recycling center in Grand Marais and hosts recycling at the Transfer Station in Tofte. Glass, plastic containers, aluminum cans and aluminum foil, steel/tin cans, magazines, mixed/office paper, newspaper, cardboard, used oil and oil filters, and lead acid batteries are accepted for recycling in Cook County. The amount of recyclables collected is expected to increase over the next ten years. Since the haulers would be responsible for the collection program and bill customers directly, the Cook County recycling program budget is expected to also remain stable over the next ten years.

5.2.4 Yard Waste Management

The yard waste management program in Cook County encourages residents to manage yard waste through backyard compost piles or by using a mulching lawnmower. Using yard waste in residents' own compost piles and/or mulching lawnmowers keeps yard waste out of the overall waste stream. Lawn clippings may be brought to the Cook County Recycling Center for composting. Cook County will evaluate expanding the yard waste composting site in the future. Currently, Cook County allows residents to dispose of such waste as grass clippings, leaves, and pruning clippings which have been banned from landfills in Minnesota. By encouraging this reuse of yard waste, Cook County has identified the portion of the waste stream which can be used in agricultural practices in accordance with Minnesota Statues 115A.46, Subdivision 2(d).

The brush and tree waste disposal sites in Cook County along the Gunflint Trail at Cross River Pit and East Bearskin Pit, as well as the Big Bay Point Pit, Ball Club Road Pit, Pike Lake Pit, and Caribou Lake Pit are expected to continue to accept clean brush, limbs, branches, un-bagged grass clippings, un-bagged leaves, and vegetative garden waste. The yard waste management program has been successful and is expected to continue.

No negative environmental impacts, including odor problems or leachate generation, have occurred in Cook County from yard waste management.

5.2.5 Tire Management

Tires in Cook County are managed as Problem Materials and have been banned from Minnesota landfills. Cook County strives to keep tires out of land disposal facilities and encourage proper management. The Grand Marais Transfer Station operated by North Shore Waste accepts tires at its facilities. Tires are also accepted at the WLSSD Transfer Station and at the Tofte Transfer Station during special collection days.

The amount of waste tires to be collected from Cook County is projected to remain fairly constant at 10.4 tons per year. The current waste tire program is expected to be maintained over the next ten years. The waste tire program budget is also expected to remain steady.

5.2.6 Used Appliances

Used appliances are managed as Problem Materials and have been banned from Minnesota landfills. Salvage yards are not able to crush and recycle appliances that have not been processed. To properly manage used appliances and prevent environmental releases of materials such as Freon, mercury, and

PCBs, appliances and white goods are accepted at the WLSSD Transfer Station and at the Tofte Transfer Station during special collection days. The program has been successful and will be maintained.

Two private appliance dealers accept and process used appliances. Almost Home is an appliance sales and service business in Grand Marais and will recycle used appliances. Isak Hansen's True Value and Builders builds and remodels cabins and homes, constructs roads and sewers, and supplies materials to contractors and homeowners. Isak Hansen's is located in Lutsen and also accepts and processes used appliances.

In 2011, 31.1 tons of used appliances were collected in Cook County. This amount is anticipated to remain steady over the next ten years. The budget for management of used appliances is anticipated to remain steady for the next ten years.

5.2.7 **Motor Vehicle Waste Management**

Automotive mercury switches, motor vehicle fluids and filters, and lead-acid and dry cell batteries are all components of motor vehicles which must be managed to prevent environmental and public health impacts. Motor vehicle waste is managed as a Problem Material and has been banned from Minnesota landfills. The goal for Cook County solid waste management is to prevent unmanaged motor vehicle waste disposal.

Used oil and oil filters are collected at the Recycling Center in Grand Marais for residents and businesses of Cook County at no charge.

Auto batteries, as well as marine batteries, are collected at any time in covered boxes at the Cook County Recycling Center. A more convenient recycling option may be to return auto batteries to the stores that sell them. Additionally, they are collected at the WLSSD Transfer Station. This encourages the proper management of batteries and prevents lead and acidic fluid contamination. In 2011, 31.8 tons of vehicle batteries were collected in Cook County.

Automotive switches contain mercury and are banned from landfills and incinerators.

The automotive waste programs are established and will be maintained for the next ten years. The budget for automotive waste management is expected to remain steady.

5.2.8 **Household Hazardous Waste**

Household hazardous waste (HHW) is comprised of common chemical products found in nearly all homes. The products are safe if used for their intended purpose, but should not be disposed of at landfills or incinerators due to their chemical composition. HHW is collected twice a year, in the spring and fall, at the Recycling Center where materials are collected, processed, and shipped to facilities for proper disposal. Occasionally, the Tofte Transfer Station hosts a collection day for HHW. The WLSSD Transfer Station also collects regional HHW.

A list of acceptable materials for the HHW collection is available on the WLSSD website. Acceptable materials collected during Cook County collection events are publicized and may differ from materials accepted at the WLSSD Transfer Station. Examples of acceptable materials are paint, wood

preservatives, home and garden pesticides, automotive products, solvents and flammables, acids, adhesives, and household batteries. Unacceptable materials include tires, radioactive or explosive materials, and compressed gas.

Cook County also hosts occasional very small quantity generator (VSQG) hazardous waste collection. In 2000, Cook County established an outdoor hazardous waste temporary storage facility which holds HHW for up to 90 days.

To help reduce and reuse materials, the WLSSD Transfer Station hosts a Product Reuse Center. At no charge, residents are able to take HHW materials to use for their intended purpose. Examples of items which may be available are paint, stain, varnish, adhesives, auto chemicals, cleaning products, and residential pesticides.

The HHW programs are part of the educational materials advertised and distributed by Cook County. The programs are established and will be maintained for the next ten years. In 2011, \$11,753 was budgeted for the management of HHW and problem materials. This amount is likely to remain fairly constant over the next ten years.

5.2.9 Construction and Demolition Debris

Construction and demolition (C&D) debris is managed within Cook County by Pederson's Disposal and Nelson Machine Products who serve Cook County and collect and haul C&D waste to C&D landfills outside of Cook County; all public and private C&D landfills within Cook County have closed. The North Shore Waste Transfer Station also accepts construction material. Waste is either hauled directly to Duluth or is transferred to WLSSD prior to final disposal.

Cook County's goal with respect to C&D waste is to responsibly manage and dispose of the waste. The Public Health Code provides information and policy for ensuring that haulers have the appropriate license and provide safe and secure transfer of waste.

The programs monitoring and regulating C&D debris will be maintained over the next ten years.

5.2.10 Electronics and Fluorescent Bulbs

Electronics and fluorescent bulbs are managed wastes. Fluorescent bulbs are banned from disposal in Minnesota landfills due to the mercury powder contained within the glass tubes. The North Shore Waste Transfer Station does not accept fluorescent bulbs but does accept electronics. The Cook County Recycling Center in Grand Marais hosts two e-waste recycling events per year, in the spring and fall, and the Tofte Transfer Station collects electronics once a year.

In 2011, 9 tons of electronic waste and 0.1 tons of fluorescent and high-intensity discharge (HID) lamps were collected in Cook County. The Cook County collection programs will be maintained and expanded over the next ten years as Cook County explores potential partnerships with local and regional organizations. The budget for electronics and fluorescent bulb management is expected to remain steady as any potential partnerships would need to be efficient and cost-effective.

5.2.11 Pesticide Containers

Pesticide containers are managed as HHW. Home and garden pesticides are collected as part of household hazardous waste collections, but empty containers are typically not accepted. Pesticide containers should be triple-rinsed or pressure-rinsed immediately after emptying. According to the Minnesota Department of Agriculture website, if a container is emptied and allowed to dry, a residue may form that is highly resistant to rinsing. Containers may be able to be returned to the pesticide retailer for recycling.

5.2.12 Organics

Cook County is interested in an efficient, convenient, and cost-effective method for composting organic material and keeping it out of the waste disposal stream. The Recycling Center currently has a yard waste composting area; Cook County will evaluate the possibility of hosting backyard composting exhibitions and educational sites to encourage residents to manage their organic waste. Cook County will also meet with local groups to evaluate the possibility of a local source-separated organics composting site that could provide residents and businesses of Cook County with another option for managing organic waste. Since Cook County has a high level of tourism, the resorts, hotels, and restaurants provide a potential starting point for source-separated organics composting.

The budget for organics management is expected to remain steady over the next ten years.

5.2.13 Other

Other materials are managed within the Cook County integrated solid waste management system as appropriate. Scrap metal is accepted from residents and businesses at the Recycling Center where it is consolidated and shipped to recycling markets. There is opportunity to recycle other materials, such as mattresses and textiles. Cook County hopes to establish a mattress recycling program working with resort and hotel operations and to locate a workable market for waste textiles.

5.3 DISPOSAL SYSTEM

The Cook County solid waste disposal system was described in Chapter 3 of this SWMP. The disposal system is the end-life destination for Cook County solid waste and is currently composed of the local haulers contracting with WLSSD. These disposal destinations are anticipated to continue to be used for the next ten years.

5.3.1 Western Lake Superior Sanitary District (WLSSD)

The WLSSD is a special purpose unit of government that was created by the Minnesota State Legislature in 1971 to address pollution issues in the Lower St. Louis River Basin. It is governed by a nine-member citizen's board of directors. The WLSSD has been responsible for a 530 square mile area as a Regional Solid Waste Authority since 1974. Cook County is part of the WLSSD expanded solid waste service area.

The WLSSD transfer station was permitted on May 5, 1999, and is located in the Lincoln Park neighborhood in Duluth. The transfer station is owned by WLSSD and is operated by Gibson Transfer,

Inc. Approximately 120,000 tons of waste passes through WLSSD's transfer station each year from the entire extended service area.

The Transfer Station receives MSW and mixed waste from local licensed waste haulers. The MSW predominantly includes food wastes, containers and product packaging, and miscellaneous inorganic wastes from residential, commercial, institutional, and industrial sources. Mixed waste is acceptable waste that requires extraordinary methods to achieve compaction. It includes furniture and non-hazardous construction and demolition (C&D) debris.

Projections for the next ten years indicate that waste will continue to be hauled to WLSSD and landfilled at the Superior Moccasin Mike Landfill in Superior, Wisconsin. Table 5-1 below shows the anticipated amounts of landfilled waste from Cook County.

Table 5-1: Projected MSW Hauled to WLSSD, 2011-2021

MSW Projected to be Landfilled,						
Year	(tons)					
2011	3,613					
2012	3,494					
2013	3,473					
2014	3,458					
2015	3,443					
2016	3,415					
2017	3,424					
2018	3,432					
2019	3,440					
2020	3,449					
2021	3,457					
Total	34,485					

Haulers individually bring their waste to the WLSSD Transfer Station and collect fees from the residents and businesses of Cook County. Cook County is not involved in directing or organizing the hauling of County solid waste.

5.3.2 Construction and Demolition Debris

No new programs for C&D waste are projected for the next ten years, and the current management system involving private haulers and customers is expected to remain steady.

5.4 ENVIRONMENTAL AND PUBLIC HEALTH IMPACTS

Cook County's integrated solid waste system has been developed to minimize environmental and public health impacts from solid waste activities. The County encourages proper use and disposal of solid waste, especially recycling and reuse opportunities. The closed Cook County landfills are properly managed by the State of Minnesota to ensure that environmental and public health impacts are minimized.

5.5 ALTERNATIVES

The integrated solid waste management system in Cook County has been well established and relies on partnerships with the haulers and nearby WLSSD. If there are major operational difficulties with the integrated solid waste management system as established in this Plan, the county will evaluate, identify, and implement alternatives to continue to serve the region. The alternatives process will include environmental, operational, and economic criteria and be evaluated using a quantitative matrix-based system. If necessary, Cook County will work directly with the waste haulers to determine alternatives to the current system of hauling waste to WLSSD for disposal.

Cook County does not anticipate major operational difficulties arising from its proposed integrated solid waste system.

5.6 GOAL VOLUME TABLE

The Cook County Goal Volume Table with solid waste disposal data from 2011 and projected solid waste generation and disposal data from 2012-2021 is attached in Appendix A. The goal volume table shows projected amounts and destinations for solid waste generated within Cook County, including projected amounts of problem materials and recycled materials.

Total MSW generated within Cook County is projected to increase slightly from 4,881 tons in 2011 to 5,257 tons in 2021. Recycling is expected to increase through greater education and expanded recycling opportunities. In 2011, 25.4% of Cook County waste was recycled. By 2021, at least 31.5% of waste should be recycled. Though there no longer are MPCA SCORE yard waste credits or source reduction credits to increase the county recycling rate, Cook County will continue managing yard waste through disposal locations and continue to encourage source reduction.

5.7 FUNDING AND BUDGETS

This section contains information regarding Cook County solid waste program funding. The future solid waste program funding goals and policies are to continue to use County funds to support the Cook County integrated solid waste system. The county also has a goal to continue receiving applicable SCORE funding to support recycling initiatives and programs.

A projected ten-year county solid waste budget including itemized capital and operating costs for each major solid waste program and the annual cost per ton and cost per Cook County household is attached in Appendix B.

5.8 ON-SITE AND UNAUTHORIZED DISPOSAL

It has been estimated that there is a population of 70, or 1.35% of the Cook County population, using on-site disposal for managing their own solid waste. On-site disposal includes using burn barrels or burying waste. Based on MPCA estimations of 2.3 pounds of MSW generated per person per day, this equates to 29 tons of Cook County MSW disposed on-site. Additionally, approximately 120 tons of problem materials are estimated not to be recycled, for a total amount of 149 tons of Cook County waste being illegally disposed of outside the integrated solid waste management system. Cook County recognizes the importance of collecting as much waste as possible within the sanctioned solid waste

management system in order to protect health and the environment. The programs in place to encourage proper handling of waste, such as educational programs and providing collection or drop-off locations for residents, are established and projected to continue. Future on-site and unauthorized disposal is projected to gradually decrease as the programs succeed.

5.9 PUBLIC PROGRAMS

This update to Cook County's Solid Waste Management Plan was developed with input from the Cook County Solid Waste Officer. It will be presented at a regularly scheduled County Board meeting for review and comment. The public and interested parties will have the opportunity to comment on this plan and Cook County's integrated solid waste management system. Comments and concerns will be documented within the Board minutes.

Information and documentation on the Solid Waste Management Plan development process and all solid waste activities are on file with Cook County Planning and Zoning.

This plan will expire in 2023. Cook County will begin review of the update in January of 2023.

6.0 Summary

Cook County is a rural county in northeastern Minnesota and is home to a growing population of over 5,000 residents. It covers a land area of approximately 1,452 square miles and is composed of the City of Grand Marais, Lutsen Township, Schroeder Township, Tofte Township, the Grand Portage Indian Reservation, and unorganized Cook County. The Cook County population has been relatively steady since 2000 but the Minnesota State Demography Center projects a gradually increasing population through 2023. The majority of Cook County is rural; approximately 90% of Cook County is publicly owned. Cook County is home to natural resources including Lake Superior and vast forests. Cook County is likely to see a decline in the labor force from 2005-2035 as the County population ages. There is a strong seasonal effect to employment trends but unemployment levels are low at 4-9%. The major employers in Cook County are in the service and government sectors. The predictable seasonal variations and stable permanent population are beneficial for solid waste management planning and accommodating the seasonal visitors within the county.

Solid waste collection and generation has remained steady in Cook County. Cook County has a rural population that cannot easily be required to participate in curbside recycling or waste collection, but collection areas throughout the County encourage proper management of solid waste. There is waste collection for the County's city and three townships, as well as regional mobile collection sites along the major transportation corridors of Highway 61 and the Sawbill, Caribou, Gunflint, and Arrowhead Trails. Cook County participates with nearby Aitkin, Carlton, Koochiching, Lake, and St. Louis Counties and WLSSD in the Northeast Waste Advisory Council. Cook County owns the Tofte Transfer Station, manages the Cook County Recycling Center, and licenses solid waste haulers. The major solid waste facilities used by the County are the WLSSD Transfer Station and the Superior Moccasin Mike Sanitary Landfill. Cook County works with regional counties and communities on solid waste initiatives, as both a support of its existing partnerships and to expand upon its evolving integrated solid waste management system.

The existing Cook County integrated solid waste management system implements, applies, and enforces the rules and regulations found within the Cook County Public Health Code and relevant ordinances to provide for safe, legal, and proper management of solid waste materials. Cook County haulers encourage waste reduction through volume-based commercial collection fees. The Cook County website provides educational materials regarding proper management of recyclables and locations for waste and recycling drop-off. Information specific to HHW, problem materials, and yard waste and compost are available and published when collection dates approach. Total recycling decreased from 2007 to 2011 as paper and metal recycling decreased, at least some of which is attributable to the economic downturn. Cook County contracts with WLSSD for HHW and VSQG collection and management services. There is opportunity to increase the collection of problem materials in Cook County, especially of electronics since they are prohibited from being landfilled under Minnesota Statutes. Solid waste is transferred through the WLSSD Transfer Station to the Superior Moccasin Mike Landfill. Cook County operates a Budget Shop to reuse materials and items and keep them out of the solid waste disposal system.

The proposed integrated solid waste management system will be based on the established system. Cook County aims to ensure that viable outlets for waste materials are available to the residents of Cook County. Over the 10-year planning period, Cook County aims to expand its programs to continue to provide its residents and businesses with programs and services to properly dispose of solid waste. Specific goals include increasing levels of public information education and awareness, working with waste haulers and supporting efforts for curbside recycling in the City of Grand Marais, evaluating the expansion of the yard waste composting site, meeting with local and regional groups to evaluate the possibility of a local source-separated organics composting site, and following up on enhanced recycling efforts for electronics. The goals of Cook County recycling is to recover usable materials; specifically, to increase County recycling from 25% to over 31% by 2021. Problem materials such as tires, used appliances, and motor vehicle waste will continue to be collected by Cook County programs and partnerships with private businesses. Cook County will continue its HHW collection events twice a year at the Cook County Recycling Center and once a year at the Tofte Transfer Station, including accepting electronics. The existing disposal system of WLSSD and the Superior Landfill are projected to continue.

Cook County intends to continue providing its residents, visitors, and businesses with solid waste management services. A challenge in Cook County solid waste management is the rural nature of the County and relatively large land area and small population. The Cook County integrated solid waste management program will build on its past achievements and take advantage of new opportunities to overcome challenges it may face.

7.0 References

Bureau of Labor Statistics Local Area Unemployment Statistics Map. http://data.bls.gov/map/MapToolServlet August 12, 2013.

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Cook County, Minnesota. *Household Hazardous Waste Collection*. 20 May 2013. http://www.co.cook.mn.us/index.php/home/2108-household-hazerdous-waste-collection Accessed October 4, 2013.

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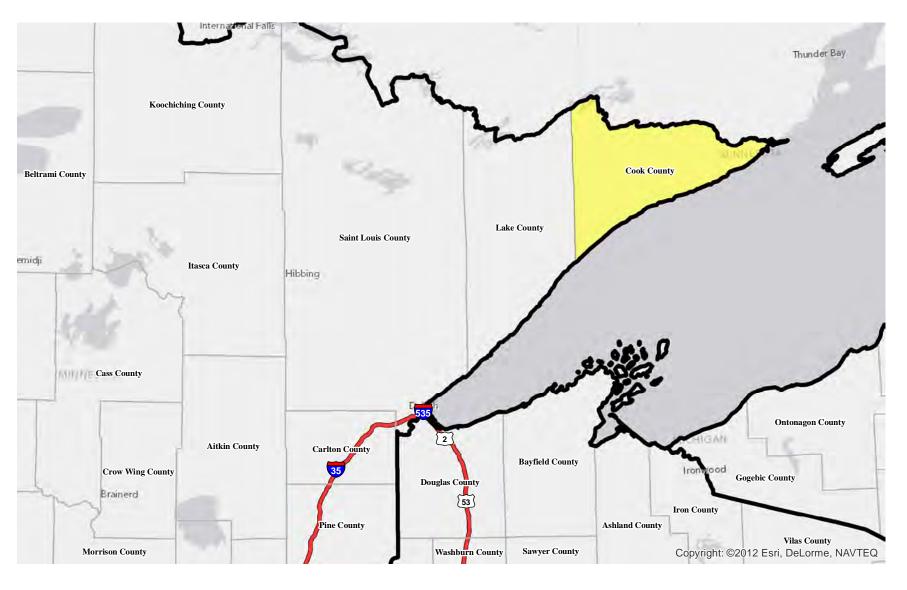
Cook County, Minnesota. Public Health Code. February 27, 1979.

Minnesota Pollution Control Agency. *Report on 2011 SCORE Programs: A summary of recycling and waste management in Minnesota*. December 2012.

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Figures



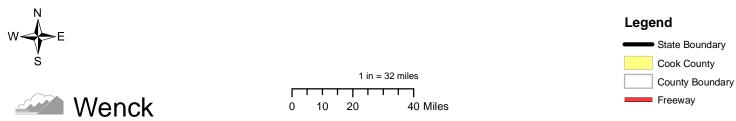
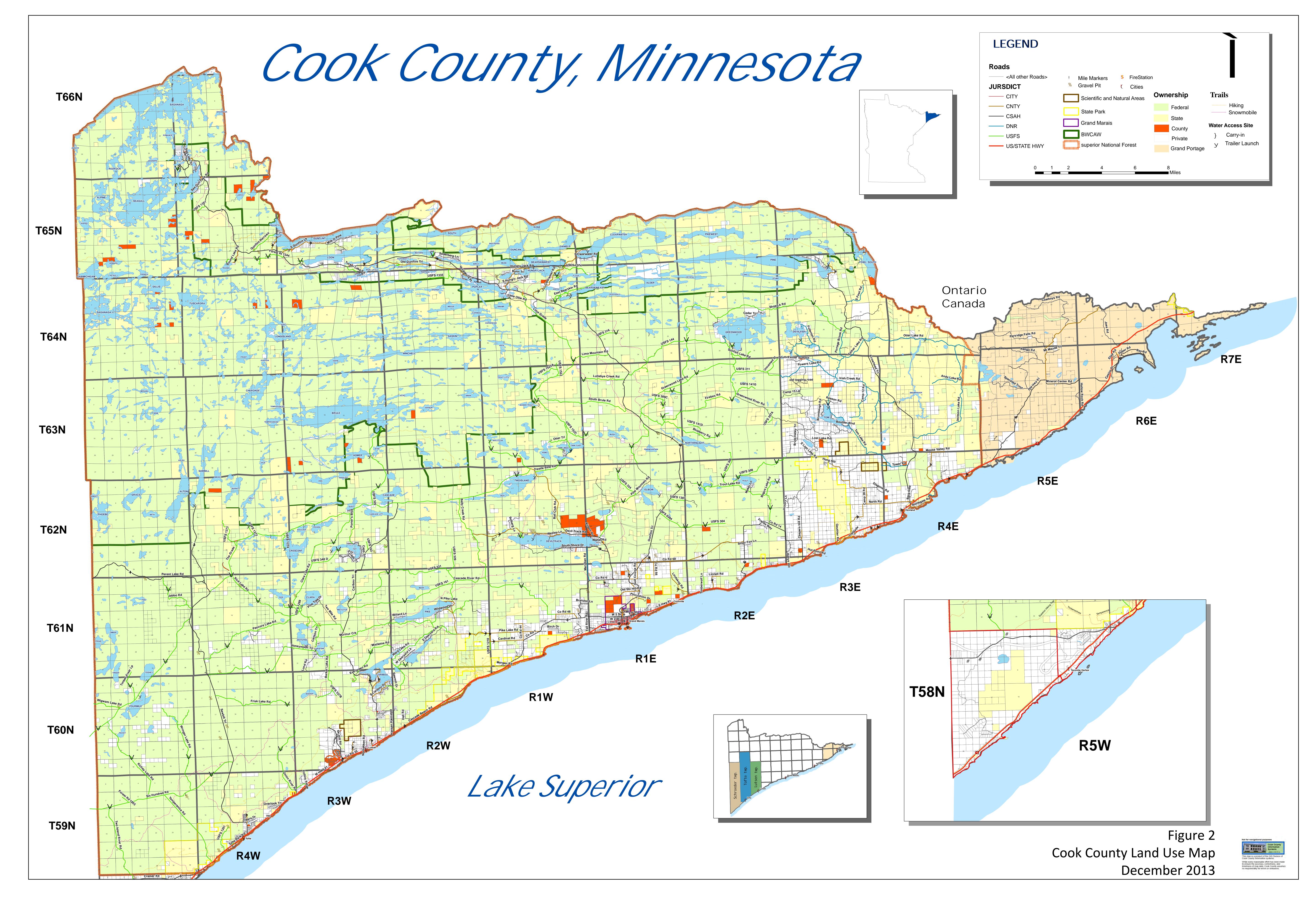
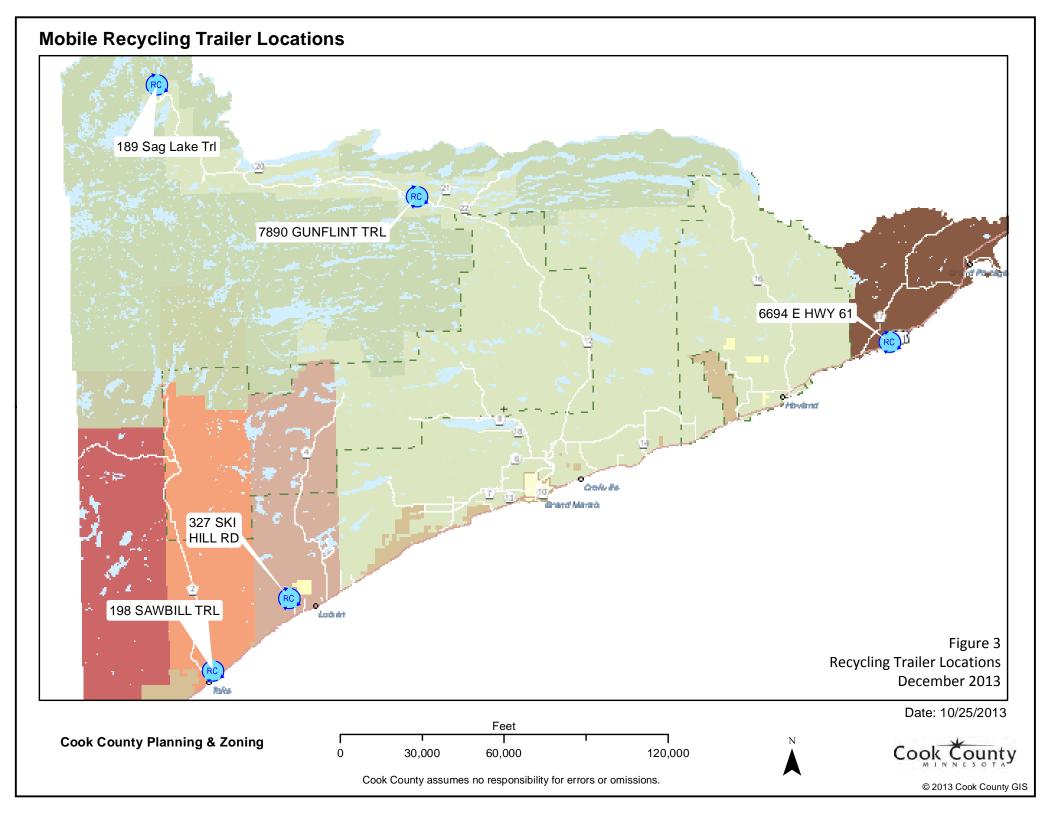
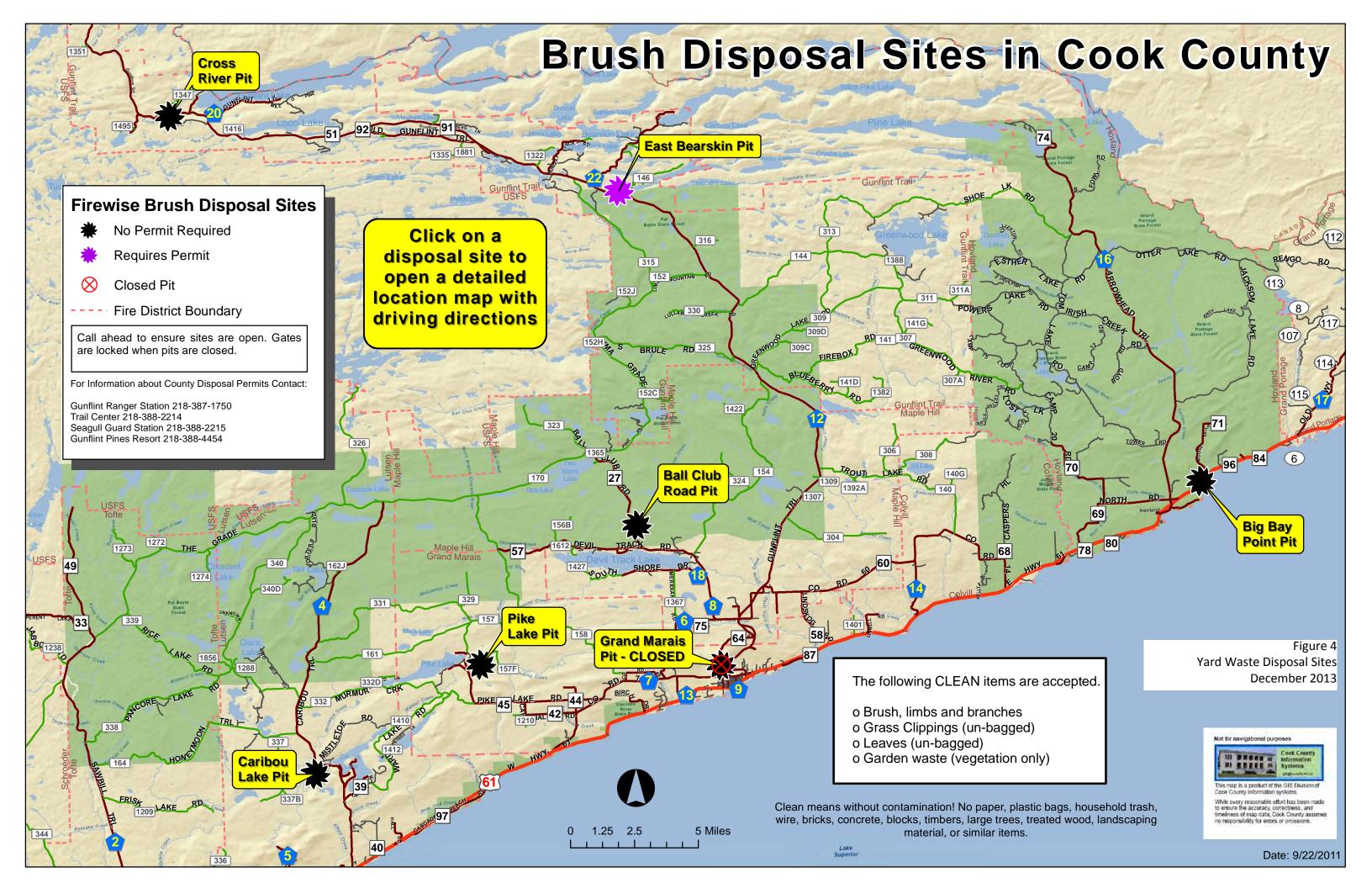


Figure 1 Cook County Location Map December 2013



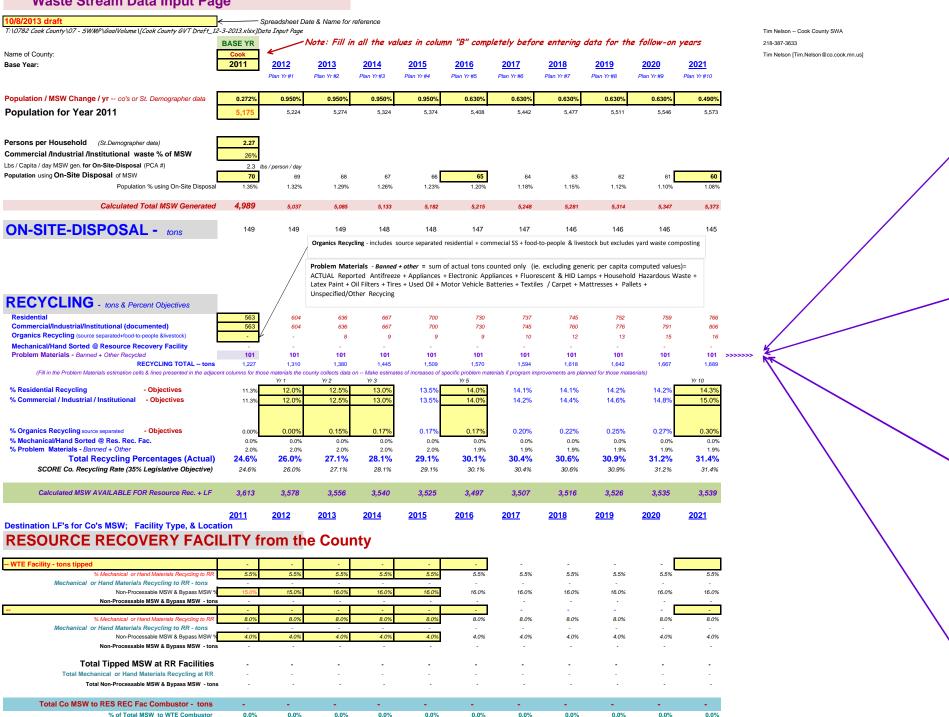




Appendix A

Cook County Goal-Volume Table

Waste Stream Data Input Page



	2011	2012	<u>2013</u>	2014	2015	<u>2016</u>	2017	2018	2019	2020	2021	
MSW Imported to Resource Reco												
-		·					. •			- 1	-	
-										ŀ		
THIS County												
THAT County	-	-	-	-	-	-	-	-	-	-	-	-
Total Imported MSW Tipped at Co RR Fac - tons										-		
Mechanical or Hand Materials Recycling at RR							-	· .			<u> </u>	
Imported MSW Non-Processable MSW & Bypass MSW - % Non-Processable MSW & Bypass MSW - tons	15.0%	15.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	
Total Imported MSW to WTE Combustor - tons	-	-	-	-	-	-	-	-	-	-	-	
Total MSW Tipped at Co RR Fac - All Co's - tons												
Total ALL MSW into WTE Combustor - tons												
Total ALL MOVI III.0 WILL COMBUSTON TOTAL												
LANDELL Destinations for Co	2011	2012	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	
LANDFILL Destinations for Co												
	ANDFILL C	OMPACTED IN	-PLACE ASSUI		l andfills locate al % use - <i>Inter</i>	d within Cook C	ounty 10%					
				MSW In-Place De	nsity Assumption =			s/cubic yard				T V- T
					ensity Assumption:	<u> </u>		s/cubic yard in-plac				Ten Yr Total
County MSW tons <u>Available</u> for Landfill Disposal	3,613	3,578	3,556	3,540	3,525	3,497	3,507	3,516	3,526	3,535	3,539	
Minnesota Landfills	0	0	٥	0		0				. г	0	
[Enter a LF name & tons in this line only if LF is located in Gook County]	0	(includes RR fac.	non-processable &	bypass MSW)	0	U	-	-	-	· L	0	-
(none) Another #3 LF	0	0	0	0	0	0	- 1	-	-	<u> </u>	0	-
Another #2 LF	0	0	0	0	0	0	-	-	-	-	0	-
Out-of-State Landfills				1			0.500	0.544	0.500	0.504		05.000
Superior Moccasin Mike Landfill	3,613	3,578	3,556	3,540 0	3,525	3,497	3,506	3,514	3,522	3,531 -	3,539	35,308
""	0	0	0	0	0	0	-	-	-	-	0	-
"CHECK TONS to LF"-this # <u>must match</u> LF tons AVAILABLE Abbreviation for primary landfill in county =	3,613	3,578	3,556	3,540	3,525	3,497	3,506 ote:the totals in colu	3,514 mns H to K will vary	3,522 y slightly from the M	3,531 MSW tons Available	3,539 values above	35,308
MSW Imported to a Landfill loo	cated	within	Cook	Co. fro	om Oth	er Cou	nties					
	-	-	-		-	-	-	-	-	•	-	-
								-				-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-		-		-	-
Total MN MSW Imported to the Co. Landfill Out-of-State MSW Imported to LF in the County	-	-	-	-	-	-	-	-	-		-	-
Other State MSW	-	-	-	-	-	-	-	-	-	- [-	-
ALL MSW Imported to the LF in the Co. Remaining MPCA Permitted Capacity - cy	-		-		-		-	-	-			-
петапту мгол генишей сараску - су	-	cubic yards										-
Construction / Development	16:11	teleter et	0-									
Construction / Demolition Waste Land	atilis W	itnin the	<u>: Co.</u>									
Demolition Landfills	Note: ty	pically C&D r	eceived at the	gate will weig	h approximate	ly 460 pounds p	per cubic yard					
County X C&D Landfill cy received	-	-	-	-	-	-	-	-	-	-	-	
YYY Privately Owned C&D LF cy received ZZZ Private Company's C&D LF cy received	-	-	-	-	-	-	-	-	-		-	
Temporary One-Time-Use C&D disposal sites cy	-		-		-	-	-	-	-	- [-	
total cy to C&D disposal sites	-	-	-	-	-	-	-	-	-	-	-	-
Yard Waste - received at YW sites in Coun	<u>t</u> y		Note: Yard Was	ste cubic yard	/ tonnages are i	not included as pa	art of the county	MSW generatio	n tonnage total			
Yard Waste - received at YW sites in Co Cubic Yards	-		-	-	-	-	- 1	-	-	- [-	-
T:\0782 Cook County\07 - SWMP\GoalVolume\[Cook County GVT Draft_12-3-2013.xlsx]D	ata Input Page											

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Recycling of Problem Mater	rials/HH	W: (enter	only the doc	umented re	cvcled tons	the county is	s aware of b	elow in the	vellow cells.		
,. 3						the adjacent					
MSW Change & Population Change / yr		1.0%	1.0%	1.0%	1.0%	0.6%	0.6%	0.6%	0.6%	0.6%	0.5
List the Problem Materials tonnage values the	e county has	documented	values for a	and show ar	nticipated in	creases due	to improved	l recycling e	fforts.		
Electronics	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.
Fluorescent & HID Lamps	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.
Household Hazardous Waste	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0
_atex Paint	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.
Mattresses	-	-	-	-	-	-	-	-	-	-	-
Pallets	-	-	-	-	-	-	-	-	-	-	-
Fextiles / Carpet	-	-	-	-	-	-	-	-	-	-	-
Unspecified/Other	-	-	-	-	-	-	-	-	-	-	-
PM's Legislatively banned from landfill dispos	sal										
Appliances	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.
Antifreeze		-	-	-	-	-	-	-	-	-	-
Oil Filters	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.
Fires (excludes tire shred combustion)	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10
Jsed Oil	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15
/ehicle Batteries	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31
Problem Material Recycling Totals	101	101	101	101	101	101	101	101	101	101	1

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 value.

SCORE Generic Calculated Tonnage Population 5,175 Appliances pliances / capita /yr = 0.10#/appl/yr= 518Lbs/appliance 150 Batteries no. / cap /yr & Total #= 0.33 #/batteries/yr = 1,708 pounds / battery = 40 Recycling Rate & TONS= 93% 31.8 Fluorescent Tubes no. / cap /yr & Total # = 2.4 IF Actual # Collected= 6,000 Tires no. / cap /yr & Total #= 1 # per tire = 20 (rate excludes incineration) Recycling Rate & TONS= 20% 10.4 Oil filters #/cap/yr & total # = 1.78 Oil filters/lbs = 1 Recycling Rate & TONS= 36% 1.7 Used Oil gal / cap /yr & Total gal= 4.0 Used oil Lbs/gal 8 Recycling Rate & TONS= 5.0% 4.1

79.0

Appendix B

Cook County Solid Waste System Budgets

APPENDIX B - COOK COUNTY SOLID WASTE MANAGEMENT BUDGET

1 05-Dec-13

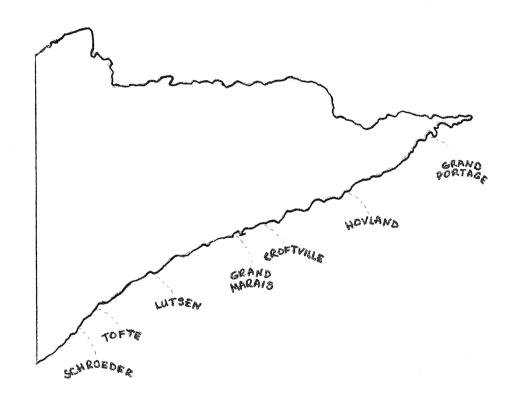
2 Inflation = 3.0%		SYSTEM COM	PONENTS F	RECYCLING + M	SW TRANSFER	STATION +LAN	NDFILL DISPOS	AL					
3 Interest Earned = 2.5%		-											
4		L	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
5													
6 Population	10 YR pop. change % =	1.0%	5,175	5,224	5,274	5,324	5,374	5,408	5,442	5,477	5,511	5,546	5,573
7 Households & Businesses	assume persons / hh =	2.55	1,740	2,049	2,068	2,088	2,108	2,121	2,134	2,148	2,161	2,175	2,186
8 (assume 250 businesses)													
9 Land Disposal													
10 WLSSD Transfer Station, Duluth, MN/Supe	·	from Cook Co.	3,613	2,146	3556	3540	3525	3497	3506	3514	3522	3531	3539
11 Cook County Temporary Transfer Station,	•	from Cook Co.	0	812	0	0	0	0	0	0	0	0	0
12 Sarona BFI Landfill, Sarona, WI (direct hau	•	from Cook Co.	0	0	0	0	0	0	0	0	0	0	0
13 Cook County Landfill, Grand Marias, MN (o	ciosed 1999)	from Cook Co.	0	0	0								
		3,613	2,958	3,556	3,540	3,525	3,497	3,506	3,514	3,522	3,531	3,539	
16 TOTAL ABATEMENT PROGRAM TONS - Recycling, YW, HHW, Spec. W tons/hr.		1,376	2,079	1,529	1,593	1,657	1,718	1,742	1,767	1,792	1,816	1,834	
17 Total MSW (estimated)			4,989	5,037	5,085	5,133	5,182	5,215	5,248	5,281	5,314	5,347	5,373
18 Tons / Day 6 day week			12	9	11	11	11	11	11	11	11	11	11
19 Est. Cook Commercial Waste Generation @ % of MSW : 26%		939	769	925	920	917	909	911	914	916	918	920	
20													
21													
SUMMARY OF SOLID WAST	E EXPENDITURES W	VITHIN COOK (COUNTY										
24 COUNTY SOLID WASTE PROGRAM C	COSTS												
25 Abatement Program Costs by the Co inc	ludes staff & recyc fac.		\$324,489	\$391,693	\$396,010	\$328,834	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489
26 Cook Co. Transfer Station Costs			\$52,181	\$54,271	\$56,446	\$53,625	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 MSW/DEMO Landfill Costs[MSW landfill cl	losed 1999 & Demo landfill 2	001]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28 TOTAL COUNTY SOLID WASTE MANAGEM	ENT PROGRAM COSTS		\$376,670	\$445,964	\$452,456	\$382,459	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489
29 Cost / HH & Business / Year (occupied I	HH)		\$216.48	\$217.68	\$218.77	\$183.19	\$153.96	\$152.99	\$152.04	\$151.09	\$150.14	\$149.20	\$148.47
30 Cost / HH & Business / Month			\$18.00	\$18.10	\$18.20	\$15.30	\$12.80	\$12.70	\$12.70	\$12.60	\$12.50	\$12.40	\$12.40
31													
32 REVENUE ESTIMATES FOR COUNTY	WASTE MANAGEMENT P	ROGRAMS											
33 MPCA HHW Grants + Regional Program Sp	oonsor		\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500
34 SCORE Funding \$		\$55,950	\$0	\$0	\$167,850	\$55,950	\$55,950	\$55,950	\$55,950	\$55,950	\$55,950	\$55,950	
35 Solid Waste Disposal Fees and Taxes		\$47,923	\$58,887	\$73,000	\$75,190	\$77,446	\$79,769	\$82,162	\$84,627	\$87,166	\$89,781	\$92,474	
36 Solid Waste Management Fee			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
37 License Fees			\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200
38 General Revenue Tax Fund			\$269,097	\$383,377	\$375,756	\$135,719	\$187,393	\$185,070	\$182,677	\$180,212	\$177,673	\$175,058	\$172,365
39 GROSS REVENUE TOTAL for County	Solid Waste Management Pr	rograms	\$376,670	\$445,964	\$452,456	\$382,459	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489

ABATEMENT PROGRAMS & EXPENSES	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
43											
44											
45											
46 WASTE REDUCTION and EDUCATION 47	\$1,100	\$1,100	\$1,100	\$1,100	\$1,133	\$1,167	\$1,202	\$1,238	\$1,275	\$1,313	\$1,353
48 RECYCLING											
49 Contracted Recycling Center(s) Services	\$258,269	\$284,012	\$276,810	\$296,752	\$291,444	\$290,453	\$289,432	\$288,380	\$287,297	\$286,181	\$285,032
Contracted Commercial/Industrial Collection Service											
51 Direct Capital	\$0	\$54,657	\$88,020	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
52 Total Recycling Cost	\$258,269	\$338,669	\$364,830	\$296,752	\$291,444	\$290,453	\$289,432	\$288,380	\$287,297	\$286,181	\$285,032
53											
54 YARD WASTE COMPOSTING	\$950	\$950	\$950	\$979	\$1,008	\$1,038	\$1,069	\$1,101	\$1,134	\$1,168	\$1,203
55											
56 HOUSEHOLD HAZARDOUS WASTE											
57 Program Operating Costs	\$11,753	\$9,058	\$9,330	\$9,610	\$9,898	\$10,195	\$10,501	\$10,816	\$11,140	\$11,474	\$11,819
58 Total Annual Cost	\$11,753	\$9,058	\$9,330	\$9,610	\$9,898	\$10,195	\$10,501	\$10,816	\$11,140	\$11,474	\$11,819
59											
60 COUNTY STAFF & ADMINISTRATION - only for time spent on solid	waste activities										
61 Staff	\$32,433	\$29,170	\$13,863	\$14,279	\$14,707	\$15,148	\$15,603	\$16,071	\$16,553	\$17,050	\$17,561
62 Benefits	\$9,616	\$8,809	\$3,937	\$4,055	\$4,177	\$4,302	\$4,431	\$4,564	\$4,701	\$4,842	\$4,987
Administration, travel, equipment, S. Waste Committee, etc.	\$10,368	\$3,937	\$2,000	\$2,060	\$2,122	\$2,185	\$2,251	\$2,319	\$2,388	\$2,460	\$2,534
64 Total Solid Waste Staff & Administration Cost	\$52,417	\$41,916	\$19,800	\$20,394	\$21,006	\$21,636	\$22,285	\$22,954	\$23,642	\$24,352	\$25,082
65											
GROSS EXPENDITURE FOR COUNTY ABATEMENT PROGRAMS WR, Recycling, YW Composting, HH Haz. Waste, & Special Waste											
67 TOTAL GROSS COUNTY ABATEMENT PROGRAMS EXPENDITURE	\$324,489	\$391,693	\$396,010	\$328,834	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489	\$324,489
68 HOUSEHOLD GROSS EXPENDITURE / YR - including Co. Staff	\$186.49	\$191.19	\$191.48	\$157.50	\$153.96	\$152.99	\$152.04	\$151.09	\$150.14	\$149.20	\$148.47
69 MONTHLY HOUSEHOLD GROSS EXPENDITURE - including Co. Staff	\$15.54	\$15.93	\$15.96	\$13.13	\$12.83	\$12.75	\$12.67	\$12.59	\$12.51	\$12.43	\$12.37
70 NET COST / Household / Month after SCORE grant \$\$	\$12.86	\$15.93	\$15.96	\$6.43	\$10.62	\$10.55	\$10.49	\$10.42	\$10.35	\$10.29	\$10.24
71 NET COST / ton / year	\$65.04	\$77.76	\$77.88	\$64.06	\$62.62	\$62.22	\$61.83	\$61.44	\$61.06	\$60.69	\$60.39

Appendix C

Cook County Public Health Code

COOK COUNTY PUBLIC HEALTH CODE



COOK COUNTY PUBLIC HEALTH CODE

CHAPTER I

DEFINITIONS

February 27, 1979

- 1.0 Unless specifically altered, terms and abbreviations used in this Code shall be interpreted in a manner consistent with Minnesota Statutes, Chapters 115, 116 and 400 and regulations of the Pollution Control Agency, which have or hereafter may be adopted under these provisions. Terms not specifically defined by law shall be construed in accordance with the context and professional usage. Throughout the text of this Code, unless the context clearly requires otherwise, the word person includes a firm, association, organization, partnership, trust, company, or corporation as well as an individual. The singular shall include the plural and vice versa; the masculine shall include the feminine and vice versa; the words "shall" or "will" are interpreted to be mandatory; the term "may" is interpreted to be permissive. The term "or" may mean "and" and "and" may mean "or" if the sense requires it.
- 1.1 Agency. The Minnesota Pollution Control Agency, it agent or representative.
- 1.2 Board of Adjustment. The Cook County Board of Adjustment.
- 1.3 Board of Health. The Cook County Board of Health.
- 1.4 <u>Chapter</u>. A chapter of the Cook County Public Health Code or any regulation incorporated by reference therein.
- 1.5 Code. The Cook County Public Health Code.
- 1.6 County Board. The Board of Commissioners for Cook County, Minnesota.
- 1.7 <u>County Solid Waste Management Plan</u>. The Cook County Solid Waste Management Plan developed and approved by the Cook County Board of Commissioners.
- 1.8 Cover material. An earthen material, which is used to cover compacted solid waste in a sanitary landfill.
- 1.9 Garbage. Material resulting from the handling, processing, storage, preparation, serving and consumption of food.
- 1.10 Individual Sewage Treatment System. A sewage treatment system, or part thereof, serving a dwelling, or other establishment, or group thereof, which utilizes subsurface soil treatment and disposal. Included within the scope of this definition are septic tank-soil absorption systems, privies, chemical type toilets, and any other device that is designed to receive, treat, and dispose of sewage or human excreta.

- 1.11 Individual Sewage Treatment Systems Standards. The individual sewage treatment systems standards approved by the County Board.
- Land Pollution. The presence in or on the land of any solid waste in such quantity, of such nature and duration, and under such condition as would affect injuriously any waters of the state, create air contaminants or cause air pollution.
- 1.13 Nuisance. Any condition which is injurious to health, offensive to the senses, or interferes with public or private use of property.
- 1.14 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.
- Planning and Zoning Director. The person appointed as the Planning and Zoning Director for Cook County, Minnesota by the Cook County Board of Commissioners or the authorized representative of the Planning and Zoning Director.
- 1.16 Purescible Material. Solid waste which is capable of becoming rotten or which may reach a foul state of decay or decomposition.
- 1.17 Refuse. Putrescible and nonputresible solid wastes including, but not limited to, garbage, rubbish, ashes, incinerator ash, incinerator residue, street cleanings, market and industrial solid wastes, and sewage treatment wastes which are in a dry form.
- Rubbish. Nonputrescible solid wastes, including ashes, consisting of both combustible and noncombustible wastes, such as paper, cardboard, tin cans, yard clippings, wood, glass, bedding, crockery, or litter of any kind.
- 1.19 Sanitarian. The person or his authorized representative appointed as the Sanitarian for Cook County, Minnesota by the Cook County Board of Commissioners.
- 1.20 Sanitary Landfill. An area of land which is or could be used for the disposal of solid waste without creating pollution of land, water or air, harzards to the public health or safety, or public nuisance, by utilizing the principles of engineering to confine the solid waste to the smallest practical volume.
- 1.21 <u>Section</u>. A Section of a Chapter of the Cook County Public Health Code.
- 1.22 <u>Septage</u>. Those solids and liquids removed during the periodic maintenance of septic or aerobic tank, or those solids and liquids which are removed from a holding tank.
- 1.23 <u>Servicing</u>. The clearing, removing, hauling and disposal of the scum, liquid, sludge or other wastes from any septic, aerobic, or any other type of treatment or holding tank.

- 1.24 Sewage. Any water carried domestic waste, exclusive of footing and roof drainage, from any industrial, agricultural, or commercial establishment, or any dwelling, or any other structure. Domestic waste includes but is not limited to liquid waste produced by bathing, laundry, culinary operations, and liquid wastes from toilets and floor drains, and specifically excludes animal waste and commercial process water.
- 1.25 Shoreland. Land located within the following distances from the ordinary high water elevation of public waters: (a) land within 1,000 feet from the normal high water mark of a lake, pond, or flowage; and (b) land within 300 feet of a river or stream or the landward side of a flood plain delineated by ordinance on such a river or stream, whichever is greater.
- 1.26 Solid Waste. Garbage, refuse, and other discarded solid materials, except animal waste used as fertilizer, including solid waste materials resulting from industrial, commercial, agricultural operations, and community activity but does not include earthen fill, boulders and rocks, or dissolved materials in domestic sewage or other significant pollutants in water resources, such as silt, dissolved or wastewater effluent, dissolved materials, suspended solids in irrigation return flows or other common water pollutants.
- 1.27 Solid Waste Management. The storage, collection, and removal of solid waste from public and private property, its transportation to intermediate or final disposal facilities and its ultimate disposal by approved methods.
- 1.28 Water Pollution. The contamination of any waters of the state so as to create a nuisance or render such waters unclean, obnoxious or impure, so as to be actually or potentially harmful or detrimental or injurious to public health safety or welfare, to domestic, commercial or industrial use, or to animals, birds, fish or other aquatic life.
- 1.29 Waters of the State. All streams, lakes, ponds, marshes, water courses, waterways, wells, springs, reservoirs, aquifers, irrigation systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through or border upon the state or any portion thereof.
- 1.30 Water Well. Any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of the same is for the location, diversion, artificial recharge, or acquisition of ground water.

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CHAPTER II

SOLID WASTE

SECTION 1 STORAGE, TRANSPORTATION AND DISPOSAL

- 1.0 The owner, lessee or occupant of any premises, business establishment or industry shall be responsible for the storage of all solid waste accumulated at that premise, business establishment or industry. No building, structure, area or premise shall be constructed or maintained for human occupancy, use or assembly without safe and sanitary facilities for storage, collection, transportation and disposal of all solid waste.
- 1.1 Garbage and similar putresible waste shall be stored in:
 - 1.11 Durable, rust resistant, non-absorbent, water-tight, rodent-proof, and easily cleanable containers, with close fitting, fly-tight covers having adequate handles to facilitate handling, or;
 - 1.12 Other types of containers acceptable to the solid waste collection service and conforming to the intent of this Chapter.
- 1.2 Solid waste shall be stored in durable containers or as otherwise provided in this Chapter. Where putrescible wastes are stored in combination with non-putrescible wastes, containers for the storage of the mixture shall meet requirements for putrescible waste containers.
- 1.3 All containers for the storage of solid waste shall be maintained in such a manner as to prevent the creation of a nuisance or unsanitary condition. Containers that are broken or otherwise fail to meet the requirements of this Chapter shall be replaced with acceptable containers.
- 1.4 Solid waste objects or materials too large or otherwise unsuitable for storage containers shall be stored in a manner which is pollution-free and nuisance-free.
- 1.5 Garbage and similar putrescible material shall not be stored on public or private property for more than two (2) weeks without written approval of the Sanitarian. Rubbish shall not be stored on public or private property for more than thirty (30) days without written approval of the Sanitarian.
- 1.6 Every person transporting and disposing of solid waste shall
 conform to the following:
 - 1.61 The vehicles and containers used for hauling solid wastes shall be operated in such a manner as not to create a health hazard or a nuisance.
 - 1.62 Vehicles and containers used for the collection and transportation of any solid wastes shall be loaded and moved in such a manner that the contents will not fall, leak or spill therefrom. Any spillage shall be cleaned up to prevent a nuisance condition.
 - 1.63 Solid waste shall be disposed of at a solid waste disposal site designated by the County Board.

SECTION 2 LICENSING COLLECTORS AND HAULERS

- 2.0 Licensing. Every person who shall engage for hire in the activity of collecting and hauling solid waste in Cook County shall be licensed pursuant to the following requirements:
 - 2.01 A license to carry on such activity shall be obtained from the County Board. License application shall be made annually on forms furnished by the County Board. The application shall be accompanied by the license fee approved by the County Board. All licenses shall expire on January 31, Licenses are not transferable. All license fees are nonrefundable.
 - 2.02 Licensees using more than one vehicle in their business shall be issued the same license number for each vehicle certified.
 - 2.03 The Sanitarian shall receive and forward to the County Board all applications for licensure. Prior to forwarding the application for licensure, the Sanitarian shall inspect the operating procedures, vehicle and equipment. The Sanitarian shall forward, along with the application, his recommendation for approval or denial of the license. Approval of the County Board shall be required prior to the issuance of a license. The County Board shall not approve a license application if either the operating procedures, vehicle or equipment are found to be not in accordance with this Chapter.
 - 2.04 Every licensee shall have knowledge of solid waste management and of the principles underlying the collection, hauling and disposal of solid waste to safeguard public health and welfare. The County Board may require an applicant to take an oral or written examination to demonstrate his qualifications for licensure.
 - 2.05 Every licensee shall provide to the Sanitarian a description of the route to be followed by all solid waste collection and transportation vehicles between the area of collection and the solid waste disposal site.
 - 2.06 Applications of existing licensees for license renewal shall be filed on or before February 1. A penalty, in an amount approved by the County Board, shall be charged in addition to the renewal fee for applications filed after that date.
- Vehicle and Equipment Certification and Inspection. All vehicles and equipment used in collecting and hauling solid waste for hire shall be inspected at least annually by the Sanitarian and certified to be inconformity with all the requirements of this Chapter. Vehicle and equipment inspection shall be requested from the Sanitarian within six (6) months from the effective date of this Chapter or upon the purchase of such vehicle and equipment after that date. A vehicle inspection application shall be made on forms furnished by the County Board for each vehicle used in collecting and hauling solid waste. The licensee shall be provided with a written inspection report containing a precise description of any deficiencies, recommendations for their correction and the date

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when the corrections shall be accomplished. The licensee shall be required to allow free access to authorized representatives of the County, the Agency, or to the authorized representatives of any other governmental agency at any reasonable time for the purpose of making such inspections as may be necessary to determine compliance with the requirements of this Chapter or any other applicable statute, ordinance or regulation.

- 2.2 Equipment requirements. All vehicles and equipment used in collecting and hauling solid waste for hire shall conform to the following.
 - 2.21 Vehicles and equipment shall be kept clean and in good repair.
 - 2.22 Vehicles and equipment shall be used for no other purpose except the collection and transportation of solid waste.
 - 2.23 Vehicles and equipment must be stored in a manner which will not cause a nuisance.
 - 2.24 Vehicles shall have leak-proof storage bodies of easily cleanable steel construction, completely covered with metal or heavy canvas.
 - 2.25 Any person subject to the requirements of this section must provide facilities for washing the vehicles. Such facilities must be designed to prevent a nuisance.
 - 2.26 Vehicles shall be properly identified. Every solid waste licensee shall be required to affix a sticker on both sides of each vehicle which display the words "Cook County Sanitary Licensee" and immediately under these words "License No. " with the number of his license on the space so provided. This sticker will be provided by Cook County as a part of the license.
- 2.3 Operating Requirements. Every person engaged for hire in the activity of collecting and hauling solid waste shall conform to the following:
 - 2.31 Vehicles and containers used for the collection and transportation of any solid waste shall be loaded and moved in such a manner that the contents will not fall, leak, or spill therefrom. Any spillage shall be cleaned up to prevent a nuisance condition.
 - 2.32 Collection operations on the property served shall be conducted in a sanitary manner.
 - 2.33 Solid waste shall be disposed of at a solid waste disposal site having County Board approval and Agency permit.
 - 2.34 Monthly Reports. Every person engaged for hire in the activity of collecting and hauling solid waste shall submit a monthly report to the Sanitarian. The information on the reports shall include, but not be limited to the names of the licensee, the amounts of solid waste dumped, and the location and method of disposal. Monthly reports will be due within 10 days after the end of each month.

SECTION 3 REGULATIONS FOR SANITARY LANDFILL SITES

- 3.0 No site for a sanitary landfill shall be established, operated or maintained without first obtaining a permit from the Agency and approval of the County Board. Approval of the County Board shall be required prior to the application for a permit of the Agency.
- 3.1 No approval shall be granted for establishment, operation or maintenance of a sanitary landfill site unless the use of said site is in accordance with the County Solid Waste Management Plan and the Cook County Zoning Ordinance.
- 3.2 Approval of the County Board for the establishment, operation or maintenance of a sanitary landfill site, shall be conditioned on the preparation, by a registered professional engineer of Minnesota, of plans and specifications in accordance with the requirements of SW 6 Sanitary Landfill or SW 11 Exemptions and County Solid Waste Management System, whichever is applicable. The Planning and Zoning Director shall maintain in his files at least two copies of the plans and specifications required for application to the Agency under SW 6 and SW 11.
- 3.3 Approval of the County Board for the establishment, operation or maintenance of a sanitary landfill site, shall be conditioned on the preparation, by the official or person designated by the County Board, of a report to be submitted to the Agency in support of the application for a permit, or variance, for the establishment operation or maintenace of said site. The Planning and Zoning Director shall maintain in his files at least two copies of the report which shall contain the following information:
 - 3.31 Site identification
 - 3.32 Owner of record
 - 3.33 Governmental considerations
 - 3.331 Jurisdictional requirements
 - 3.332 Zoning
 - 3.34 Land characteristics
 - 3.341 General description
 - 3.342 Ground cover
 - 3.343 Soil borings (at least one to a depth of at least ten (10) feet below proposed excavation.
 - 3.35 Cover material

- 3.36 Proximities
 - 3.361 Lakes, ponds, water courses
 - 3.362 Highways, roads, parks
 - 3.363 Wells
- 3.37 Operational support
 - 3.371 Fire department responsible
 - 3.372 Water source for fire fighting
 - 3.373 Wash water for vehicles
 - 3.374 Utilities
- 3.38 Site access
 - 3.381 Haul distances
 - 3.382 Haul route characteristics
 - 3.383 Roads type, jurisdiction, bridges, etc.
- 3.39 Capacities
 - 3.391 Maximum finish elevation
 - 3.392 Site capacity
 - 3.393 Special amounts and kind of refuse
- 3.410 Site shall also meet any other requirements of the Agency and appropriate Federal agencies.
- 3.4 The establishment, operation and maintenance of all sanitary landfill sites shall conform to the requirements of SW 6 and SW 11, whichever is applicable.

SECTION 4 - SITE CLOSING

- 4.0 In the event of voluntary or involuntary abandonment of all, or a major portion of a sanitary landfill, the owner or operator shall comply with the following:
 - 4.01 Within one month after final termination of a solid waste disposal operation, or a major part thereof, the area upon which disposal was so terminated shall be covered with at least two feet of compacted earth material and adequately graded at a 2% grade to allow surface runoff.
 - 4.02 The finished surface of the filled area shall be covered with adequate top soil and seeded with native grasses or other suitable vegetation immediately upon completion, or immediately in the spring on areas terminated during winter conditions. If necessary, seeded slopes shall be covered with straw or similar material to prevent erosion.
 - 4.03 Prior to completion of a solid waste disposal operation, the Planning and Zoning Director and the Agency shall be notified in order that an investigation of the operation may be conducted by each before earth moving equipment is removed from the property.
 - 4.04 Prior to completion of an entire solid waste disposal operation a sign shall be posted and maintained for at least one year indicating the date of closure, the penalty for unauthorized dumping and the location of the nearest available solid waste disposal site.

- SECTION 5 SANITARY LANDFILL, EXEMPTIONS, AND COUNTY SOLID WASTE MANAGEMENT SYSTEM
- Pursuant to Minnesota Statutes, Section 394.25, Subdivision 8, the following regulations are herby adopted and incorporated by reference and shall be as much a part of this Chapter as if fully set forth herein:

Minnesota Pollution Control Agency, SW 6 - Sanitary Landfill and SW ll - Exemptions and County Solid Waste Management System.

At least one copy of the foregoing regulations shall be marked as official copies and filed for use and examination by the public in the office of the Cook County Auditor.

SECTION 2 - SERVICING PUMPERS AND HAULERS

- 2.0 Licensing. Every person who shall engage for hire in the activity of servicing in Cook County shall be licensed pursuant to the following requirements:
 - 2.01 A license to carry on such activity shall be obtained from the County Board. License application shall be made annually on forms furnished by the Sanitarian. The application shall be accompanied by the license fee approved by the County Board. All licenses shall expire on January 31. Licenses are not transferable. All license fees are nonrefundable.
 - 2.02 Licensees using more than one vehicle in their business shall be issued the same license number for each vehicle certified.
 - 2.03 The Sanitarian shall receive and forward to the County Board all applications for licensure. Prior to forwarding the application for licensure, the Sanitarian shall inspect the operating procedures, vehicle and equipment. The Sanitarian shall forward, along with the application, his recommendation for approval or denial of the license. Approval of the County Board shall be required prior to the issuance of a license. The County Board shall not approve a license application if either the operating procedures, vehicle or equipment are found to be not in accordance with this Chapter.
 - 2.04 Every licensee shall have knowledge of sanitation and of the principles underlying the operation and servicing of septic tanks, industrial or domestic waste holding tanks, seepage pits, grease traps, mobile public toilets or permanent or portable privies to safeguard public health and welfare. The County Board may require an applicant to take an oral or written examination to demonstrate his qualifications for licensure.
 - 2.05 License Renewal. Existing licensees application for license renewal shall be filed on or before February 1. A penalty, in an amount approved by the County Board, shall be charged in addition to the renewal fee for applications filed after that date.

- 2.1 Vehicle and Equipment Certification and Inspection. All vehicles and equipment used in servicing shall be inspected at least annually by the Sanitarian and certified to be in conformity with all the requirements of this Chapter. Vehicle and equipment inspection shall be requested from the Sanitarian within six (6) months from the effective date of this Chapter or upon the purchase of such a vehicle or equipment after that date. A vehicle inspection application shall be made of forms furnished by the County Board for each vehicle used in servicing. The operator shall be provided with a written inspection report containing a precise description of any deficiencies, recommendations for their correction and the date when the corrections shall be accomplished. The operator shall be required to allow free access to authorized representatives of the County, or to the authorized representatives of any other governmental agency at any reasonable time for the purpose of making such inspections as may be necessary to determine compliance with the requirements of this Chapter, or any other applicable statute, ordinance or regulation.
- 2.2 Equipment requirements. All vehicles and equipment used in servicing shall conform to the following:
 - 2.210 Vehicles and equipment shall be kept clean and in good repair.
 - 2.211 Vehicles and equipment shall be used for neother purpose except the hauling of septage. However, use of the vehicle for fire protection service is permissable if flushed, decontaminated and filled with clean water.
 - 2.212 Vehicles and equipment shall be stored in a manner which will not cause a nuisance.
 - 2.213 Portable containers other than approved trailer mounted servicing equipment are prohibited.
 - 2.214 Each tank shall be strong enough for all conditions of operation, leakproof, and designed to be kept tightly closed to prevent spillage or escape of odors which in transit or storage. Tanks shall be constructed of suitable metal or materials approved by the County Board and mounted permanently on a truck chassis (except where trailer mounted equipment is approved.)
 - 2.215 Pumps shall be adequate for the required service. The installation shall be designed to prevent backflow or leakage. Connections shall be provided with caps or seals.
 - 2.216 Discharge valves shall be water tight and shall be located and constructed so as to permit unobstructed discharge into the place of disposal.
 - 2.217 Hoses and piping shall be stored so as to prevent leakage or dripping in transit. Ends of hoses and piping shall be connected or sealed with tightly fitted caps or covers when not in actual use. Hoses and piping carried in closed storage compartments need not be capped or covered.

- 2.218 Any person subject to the requirements of this Section shall provide facilities for washing the vehicles, tanks, implements and tools. Such facilities shall be designed to prevent a nuisance.
- 2.219 Proper identification of vehicles used in servicing for hire shall be required. Every sanitary licensee is required to affix a sticker on both sides of each vehicle which display the words "Cook County Sanitary Licensee" and immediately under these words "License No. " with the number of his license in the space so provided. This sticker will be provided by Cook County as part of the license.
- 2.3 Operating Requirements. Every person engaged in servicing shall conform to the following:
 - 2.31 The vehicles, implements and tools shall be operated in such a manner as not to become a health hazard or a nuisance.
 - 2.32 Any spillage shall be cleaned up and the area disinfected so as to render it harmless to humans and animals.
 - 2.33 The property served shall be left in a sanitary condition.
 - 2.34 Water used for flushing servicing tanks shall be disposed of in the same manner as the septage. The discharge of septage or flushing water into a stream or lake shall be cause for immediate revocation of a license.
- 2.4 Disposal Site Septage Deposit. Septage removed from individual sewage treatment systems or any other source shall be disposed of in such a manner so as not to create a nuisance or menace to the public health. Said septage shall be disposed of by one of the following methods:
 - 2.41 Discharge into a municipal sewage treatment system.
 - 2.42 Discharge at a land disposal site that is approved by the Agency and the County Board.
- 2.5 Monthly Reports. Every person engaged in servicing shall submit a monthly report to the Sanitarian. The information on the reports shall include, but not be limited to, the names of the licensee or owner of a servicing vehicle, name and address of each person receiving services from the licensee, the amounts of sewage pumped, and the location and method of disposal; provided that, the cleaning of chemical toilets of less than 100 gallon capacity need not be reported. Monthly reports will be due within 10 days after the end of each month.

SECTION 3 LICENSING INSTALLERS, CONTRACTORS, EXCAVATORS

- 3.0 Licensing. Every person who shall engage for hire in the activity of installing, constructing or excavating for individual sewage treatment systems within Cook County shall meet the following requirements:
 - 3.01 A license to carry on such activity shall be obtained from the County Board. License application shall be made annually on forms furnished by the County Board. The application shall be accompanied by the license fee approved by the County Board. All licenses shall expire on January 31. Licenses are not transferable. All license fees are nonrefundable.
 - 3.02 The Sanitarian shall receive and forward to the County Board all applications for licensure. The Sanitarian shall forward, along with the application, his recommendation for approval or denial of the license. Approval of the County Board shall be required prior to the issuance of a license.
 - 3.03 Every licensee shall have knowledge of sanitation and of the practices and principles underlying the construction and operation of individual sewage treatment systems to safeguard public health and welfare. The County Board may require any applicant to participate in public education seminars pertaining to individual sewage disposal systems and/or to take an oral or written examination to demonstrate his qualifications for licensure.
 - 3.04 License Renewal. Existing licensees applications for license renewal shall be filed on or before February 1. A penalty, in an amount approved by the County Board, shall be charged in addition to the renewal fee for applications filed after that date.

SECTION 4 PERMITS

- 4.0 No person shall install any new individual sewage treatment system or materially alter, repair or extend any existing sewage treatment system within Cook County without first obtaining a permit from the Sanitarian and without compliance with the provisions of this Chapter and the Individual Sewage Treatment Systems Standards. Permit application shall be submitted by the property owner or his authorized representative to the Sanitarian prior to any construction of reconstruction. An application for a permit shall be made in writing on forms furnished by the County Board.
- 4.1 Filing Requirements. An application for a permit shall include at a minimum the following information:
 - 4.11 Name and address of property owner.
 - 4.12 Name of the person in charge of installation.
 - 4.13 Legal description of property.
 - 4.14 Type of proposed installation.
 - 4.15 Total square footage of dwelling.
 - 4.16 Number of bedrooms of a residence. If the structure is not a residence, the type of occupancy, the number of occupants or patrons and the estimated water consumption shall be stated.
 - 4.17 Percolation test results and soil boring data.
 - 4.18 A detailed plan shall be drawn to a recommended scale of one inch equals 20 feet, but in any case the scale used shall be sufficient to show clearly all required dimensions and distances. The following dimensions and distances shall be shown on the plan:
 - 4.181 The dimensions of the lot or a sufficient portion thereof such that all other required dimensions and distances may be shown.
 - 4.182 The dimensions of the dwelling to be served by the system.
 - 4.183 The location of the dwelling and all other buildings on the lot with distances from the lot lines to said dwelling and buildings.
 - 4.184 The location of all septic tank and other treatment tank manholes and the distance of each manhole to the dwelling and to other nearby permanent reference points.
 - 4.185 The location and dimensions or capacity of all septic, holding or other treatment tanks, soil absorption systems and replacement disposal areas.

- 4.186 The location and distance from all buildings, wells, water services, water mains, reservoirs, swimming pools or high water marks of any lake, stream, pond, or flowage located on the lot or on adjacent properties within 150 feet of the septic tanks, treatment tanks, soil absorption systems or replacement disposal areas.
- 4.187 Depth to ground water or bedrock.
- 4.2 Plan and Permit Examination. If, after consideration the Sanitarian shall be satisfied that the work contemplated will comply with the provisions of this Chapter and the Individual Sewage Treatment Systems Standards, the Sanitarian shall issue a permit.
 - 4.21 The construction authorized pursuant to the approved application, the accompanying plan, and the permit therefore shall not be altered or modified without first submitting the modifications to the Sanitarian who will determine if the modifications comply with the provisions of this Chapter and the Individual Sewage Treatment Systems Standards.
 - 4.22 The application and plan shall be accompanied by a permit fee approved by the County Board. If a permit cannot be issued by the Sanitarian, the permit fee shall not be refundable.
 - 4.23 All construction under permit issued by the Sanitarian shall be completed within one year from the date of issue, unless otherwise ordered pursuant to Section 1, 1,03 of this Chapter.

SECTION 5 SEWAGE TREATMENT SYSTEM INSTALLATION INSPECTIONS

- 5.0 Inspections. The Sanitarian shall make such inspection or inspections of the construction of a sewage treatment system as are necessary to determine compliance with this Chapter. No part of any new, altered, repaired or extended individual sewage treatment system shall be covered until it has been inspected and approved by the Sanitarian.
- 5.1 It shall be the responsibility of the permit holder or his authorized representative to notify the Sanitarian two working days in advance of the time of completion, that the system will be ready for inspection or reinspection.
- 5.2 It shall be the duty of the Sanitarian or his authorized representative to make the indicated inspection as promptly as possible to determine that construction is being carried out in accordance with the approved permit and the provisions of this Chapter.
- 5.3 It shall be the duty of the owner or occupant of the property to give the Sanitarian free access to the property at reasonable times for the purpose of making such inspections.
- 5.4 If upon inspection, the Sanitarian discovers that any part of the system is not constructed in accordance with the approved permit and provisions of this Chapter, he shall prohibit backfilling of the system and shall give the applicant written notification describing the defects and corrections. The applicant shall be responsible for the correction or elimination of all defects, and no system shall be placed or replaced in service until all defects have been corrected or eliminated.

SECTION 6 INDIVIDUAL SEWAGE TREATMENT SYSTEMS STANDARDS

6.0 Pursuant to Minnesota Statutes, Section 394.25, Subdivision 8, the following regulations are hereby adopted and incorporated by reference and shall be as much a part of this Chapter as if fully set forth herein:

Minnesota Pollution Control Agency, 6 MCAR 4.8040 Individual Sewage Treatment Systems Standards.

At least one copy of the foregoing regulations shall be marked as official copies and filed for use and examination by the public in the office of the Cook County Auditor.

SECTION 7 STATEMENT OF LIABILITY

7.0 In granting permit approval the Sanitarian or County Board is not liable for any defects in plans, specifications, or construction, plan ommissions, examination oversight, or damage that may result during or after installation and reserves the right to order changes or additions should conditions arise making this necessary.

CHAPTER IV - WATER SUPPLY

SECTION 1 GENERAL PROVISIONS

1.0 Pursuant to Minnesota Statutes, Section 394.25, Subdivision 8, the following regulations are hereby adopted and incorporated by reference and shall be as much a part of this Chapter as if fully set forth herein:

Minnesota State Board of Health Water Well Construction Code, MDH 210 and 217-230.

At least one copy of each of the foregoing regulations shall be marked as official copies and filed for use and examination by the public in the office of the Cook County Auditor.

SECTION 2 PERMITS

2.0 Application. No person shall construct any water well within Cook County without first obtaining a permit from the Sanitarian. Permit application shall be submitted by the property owner or his authorized representative to the Sanitarian prior to any construction or reconstruction. An application for a permit shall be made in writing on forms furnished by the County Board. No permit shall be required for the alteration or installation of a pump. An application for a water well permit shall include but not be limited to the following information: Name and address of the property owner, the name of the person in-charge of the well installation, legal description of the property, type of water supply to be developed, and the type of installation.

SECTION 3 WATER WELL ABANDONMENT

3.0 Report on abandonment or disuse. A report shall be made to the Sanitarian by the water well owner on forms provided by the County Board on every water well which has been abandoned or removed from service for a period exceeding one year. Such report shall include a detailed description of location, construction and geologic features and method of sealing.

CHAPTER V

LICENSE OR PERMIT REFUSAL, REVOCATION, OR SUSPENSION;
VARIANCES, HEARINGS, AND APPEALS;
ENFORCEMENT, VIOLATIONS, AND PENALTIES;
SEPARABILITY, EFFECTIVE DATE

SECTION 1 - LICENSE OR PERMIT REFUSAL, REVOCATION OR SUSPENSION

- 1.0 Any license or permit required by this Code may be refused, suspended or revoked for violations of the provisions fo this Code or refusal on the part of a licensee to correct defective equipment and/or sanitary operating procedures.
- 1.1 A written notice of intent to refuse, suspend or revoke a license or permit will be delivered to the applicant, licensee or permitee by the Sanitarian. Said notice shall specify and explain the right to appeal pursuant to Section 2 of this Chapter.
- 1.2 Revocation of a license or permit without written notice may be carried out by the Sanitarian or his authorized representative in an emergency situation where violations constitute an immediate health hazard.

SECTION 2 - VARIANCES, HEARINGS AND APPEALS

2.0 General

- 2:01 The Board of Adjustment shall have the authority to order the issuance of variances, hear and decide appeals from and review any order, requirement, decision, or determination made by any administrative official charged with enforcing this Code.
- 2.02 Applications for variances and appeals shall be made to the Board of Adjustment by any aggrieved person or by any officer, department, board or bureau of a town, municipality, county or state.
- 2.03 Appeals and variance applications shall be taken to the Board of Adjustment within 30 days of receipt of written notice from the Sanitarian of any order, requirement, decision, or determination made by him.
- 2.04 An appeal stays all proceedings in furtherance of the action appealed from unless the Board of Adjustment certifies that by reason of the facts stated in the certificate a stay would cause imminent peril to life or property.

2.1 Applications

- 2.11 All appeals and variance applications shall be filed with the Sanitarian on a proper form provided for that purpose.
- 2.12 Appeal and variance application forms shall be complete and shall clearly specify the grounds of the appeal or variance. Where required by the Sanitarian the appeal or variance shall be accompanied by detailed plans, drawn to scale, showing all details of the land area and the nature of the circumstances surrounding the appeal or variance request.
- 2.13 The variance application shall be accompanied by a fee as determined by the County Board.

2.2 Hearings

- 2.21 The Board of Adjustment shall conduct a public hearing on each application for a variance or appeal.
- 2.22 A notice for the public hearing shall be published in the official newspaper of the county at least ten days prior to teh hearing date. Such notice shall state the date, time, place and purpose of such hearing. In the case of appeals, said written notice shall be sent to the appealing party and the officer from whom the appeal is taken. In the case of variances, said written notice shall be sent to the party requesting the variance, and where applicable, to the owner of the property directly affected, to all property owners of record within 500 feet of the property in incorporated areas, and, in the case of unincorporated areas, to all owners of record within 500 feet of the affected property or to the ten properties nearest to the affected property, whichever would provide notice to the greatest number of owners.

2.23 Such hearings shall be conducted according to applicable Minnesota statutes and to the rules of procedure of the Board of Adjustment.

2.3 Decisions

- 2.31 Decisions by the Board of Aejustment shall be made within thirty-five (35) days of the date a public hearing is closed.
- 2.32 The Board of Adjustment shall keep written records of proceedings showing the vote of each member on each question, or if absent or failing to vote indicating such fact.
- 2.33 Decisions shall be rendered in writing, stating the reasons in sufficient detail so that it can be determined that the decision was made according to the criteria contained in this Code.
- 2.34 A certified copy of any order issued by the Board of Adjustment granting any variance or acting upon any appeal shall be filed with the County Recorder or Registrar of Titles for record. The order shall include a legal description of the property involved. It shall be the responsibility of the Sanitarian to carry out this provision.

2.4 Criteria for Decisions

2.41 Variances

- a) The Board of Adjustment may authorize a variance from the terms of this Code when there is a particular hardship in the way of carrying out the strict letter of this Code, and when the terms of the variance are consistent with the spirit and intent of this Code and not contrary to the public interest.
- b) "Hardship" as used in connection with the granting of a variance means the property in question cannot be put to a reasonable use if used under the conditions allowed by this Code; the plight of the landowner is due to circumstances unique to his property and not created by the landowner, and the variance, if granted, will not alter the essential character of the locality. Economic considerations alone shall not constitute a hardship if a reasonable use for the property exists under the terms of this Code.
- c) When in the opinion of the Board of Adjustment a variance may result in a materially adverse effect on the environment, the applicant may be required to demonstrate the nature and extent of the effect.
- d) It shall be the burden of the applicant to demonstrate sufficient hardship to sustain the need for a variance. Absent a showing of hardship as provided in Minnesota statutes and this Code, the Board of Adjustment shall not approve a variance.

e) The Board of Adjustment may impose conditions in the granting of variances to insure compliance and to protect adjacent properties and the public interest.

2.5 Appeals from Board Decisions

All decisions by the Board of Adjustment in granting variances or in hearing appeals shall be final, except that any aggrieved person or persons, or any department, board or commission of the jurisdiction or of the state shall have the right to appeal within 30 days after the receipt of notice of the decision, to the District Court in the county.

SECTION 3 ENFORCEMENT, VIOLATIONS AND PENALTIES

- 3.0 The Sanitarian shall be responsible for enforcement of this Code.
- 3.1 Any person who violates or fails, neglects or refuses to comply with any provisions of this Code shall be guilty of a misdemeanor. Each day that a violation continues shall constitute a separate offense.
- 3.2 The Code, in addition to other remedies, may be enforced by injunction, action to compel performance or other appropriate action to prevent, restrain, correct or abate violations.

SECTION 4 - SEPARABILITY

4.0 Should any section, subsection, sentence, clause or phrase of this code be declared invalid by a court of competent jurisdiction, such decision shall not affect the validity of this code in its entirety or any part thereof other than the part so declared to be invalid.

SECTION	5	EFFECTIVE	DATF

5.0	This Code shall be in full fo after April 15, 1979.	rce and effect from and	
	This Ordinance shall be in fu after its passage and approva		
	Passed and approved this	_day of,19	
		Board of County Commissioner	s
Attes	st:	County Auditor	

