
1.0 Executive Summary

This Solid Waste Management Plan Update proposes continuation and enhancement of the programs described herein with waste-to-energy as the preferred waste disposal method. The County will continue to modify the existing programs based on environmental, legal, economic, geographic and community changes and/or needs.

Olmsted County integrated Solid Waste Management Plan (Plan) was developed by the Solid Waste Division of the Environmental Resources Department in accordance with Minnesota Statutes 115A.46 and Minnesota Administrative Rules. The Olmsted County Solid Waste Division utilized Olmsted County's "Managing For Results Implementation Guide" to steer the process of developing this Solid Waste Management Plan Update to establish reasonable goals and strategies to achieve them.

This plan was developed to be consistent with the Olmsted County mission of *"Providing the foundation of a great community by protecting and improving the health, safety, and general well-being of Olmsted County residents; improving economic and environmental conditions; and promoting equality of opportunity."* The Olmsted County Solid Waste Division of the Environmental Resources Division mission is to *"Provide high quality, cost effective and environmentally sound integrated solid waste management services to our stakeholders."* The process to update the Plan began in February 2009 when Olmsted County participated in the Minnesota Climate Change Advisory Group goal to reduce greenhouse gas emissions and the Minnesota Environmental Initiative's Integrated Solid Waste Management Stakeholder Process. The information gathered through that process was incorporated into this plan as it was developed.

A. PURPOSE

The purpose of the integrated solid waste management system is to preserve and protect the environment, the health and safety of its citizens, and the natural resources of the County. The purpose of this Plan is to serve as a guiding document for the County Solid Waste Management programs and activities.

Population growth, economic challenges, competitive pressures, and regulatory drivers continually change the landscape of how solid waste is managed. With current economic uncertainties, the nature and rapidity of change becomes more important in determining future constituent's needs.

This 10-Year Solid Waste Management Plan will be used as the road map to achieve the mission of the Olmsted County Solid Waste Division and comply with the course set by the State of Minnesota and the U.S. government.

This Plan is based on sound strategies to achieve the goals and objectives for the next 10 to 20 years. It will help the Solid Waste Division satisfy current constituent service needs, and also provide a means for improved services in the future by facilitating decision making that clarifies options, determines priorities, allocates limited resources, and measures progress.

B. EXISTING PROGRAMS AND POLICIES AND VISION FOR THE FUTURE

Olmsted County's current integrated system was developed based on Minnesota's waste management hierarchy as described in Minnesota Statute 115A.02.

- a) Waste and toxicity reduction;
- b) Reuse;
- c) Recycling;
- d) Composting of yard and food waste;
- e) Resource recovery through mixed municipal solid waste composting or incineration;
- f) Land disposal;

Olmsted County has made a considerable investment in its solid waste facilities and programs and they are well established and accepted by the constituents. The Olmsted County Integrated system is made up of the following components:

- 1) **Waste Reduction/Education** - Public education plays an important role in Olmsted County's strategy to achieve waste abatement goals and the County is planning accordingly. Public education has, and will continue to have, a prominent role in Olmsted County's waste reduction, recycling, yard waste composting, household hazardous waste, resource recovery, and land disposal programs. The education program will continue to focus on three areas: 1) waste reduction and increasing recycling, 2) business assistance, 3) other educational needs related to the Solid Waste program and facilities. (See Section 4.2 Waste Reduction/Education).

The County provides incentives to encourage waste reduction through volume-based fees. The County intends to continue to be a positive example to local municipalities, businesses and residents by reducing waste generated from County sources and providing information and assistance to businesses and residents. The County will work to minimize the waste stream to make the most beneficial use of materials through its educational outlets. Ongoing public education and technical assistance will be provided to motivate businesses and citizens to reduce the amount of waste they produce.

- 2) **Yard Waste and Composting** - On-site management of compostable materials is seen as the best way to handle organics. The County supports outreach efforts to

encourage backyard composting. Yard waste was banned from MSW in 1989, and the County operates a 9-acre, staffed compost site for collection and processing of leaves and grass clippings. The site also serves as a drop-off site for Christmas trees which are processed into mulch. (Information on the County's yard waste composting program can be found in Section 4.3).

- 3) **Recycling** - Olmsted County has adopted and endorses state-wide recycling goals and policies, and intends to continue to meet and exceed those goals. Olmsted County is committed to reaching 50 percent recycling by 2025. The goal of 45.6 percent recycling by 2020 shown in the Goal Volume Table (Attachment A) is on track with that goal. Recycling services provided include mandatory curbside collection of recyclables and a full-service recycling center. Efforts to increase recycling are achieved primarily through education. Outreach to schools, residents and businesses to start or improve recycling programs will continue. (See also Section 4.6.)

Another approach to be evaluated is ash metal recovery and bulky waste processing to recover additional recyclable materials left in the waste stream. This would achieve several objectives. It would increase the amount of material recycled, reduce landfilling, and reduce maintenance and downtime costs at the Olmsted Waste-to-Energy Facility (OWEF).

- 4) **Hazardous Waste Management** - Toxicity reduction in the waste is critical to Olmsted County's integrated waste management system. The County operates and plans to continue operation of a Hazardous Waste Facility along with a paint and product exchange in Rochester. The County participates in a regional household hazardous waste program in conjunction with Dodge, Wabasha and Goodhue Counties. The regional program provides household hazardous waste education and mobile collections to rural communities. Very Small Quantity Generators (VSQG's) and Agricultural Waste generators can also use the Hazardous Waste Facility for disposal.

The hazardous waste program includes an educational component to raise awareness of specific hazardous wastes such as sharps and mercury containing products and hazardous waste in general. (For more information see Section 4.7.)

- 5) **Resource Recovery** - In 1987, the County started operation of a 200 ton-per-day waste-to-energy facility that would become its primary waste treatment facility. Incoming waste increased significantly through the years resulting in increased land disposal. In 2007, construction began on an additional unit that would increase capacity by 200 tons per day. Construction was completed in 2010.

The facility serves Olmsted and Dodge Counties with effective management of MSW while producing steam and electricity. The energy produced currently heats and/or cools 35 city, county, state, federal and private buildings in Rochester, and provides electricity to the local power grid. (See Section 4.8.)

- 6) **Landfilling** - The County opened the Kalmar Landfill in 1990 to serve as a multi-purpose landfill consisting of municipal solid waste (OWEF bypass), demolition and ash cells. This landfill exhibits natural and engineered protective liners as well as a comprehensive groundwater monitoring system. One option being evaluated is to mine processible waste from the landfill to utilize capacity at the waste-to-energy facility to create energy and gain landfill space for non-processible waste. Olmsted County conducted a pilot study in July of 2011. The results are currently being evaluated. If successful and financially feasible, a larger scale operation will be implemented.

The landfill will continue to be expanded as needed, however, in an area where karst geography is prevalent and landfill siting is difficult, preserving the existing landfill space is especially important. The options selected in this Plan reflect that priority. Olmsted County expects to continue to operate its facilities and programs and to continue to consider all of its options for greater landfill abatement. (See Section 4.10 for more information.)

Additional information on all of Olmsted County's facilities and programs can be found in Section 4.0.

Consistent with the programs and policies set forth in this plan, Olmsted County hereby establishes that recovery of resources from MSW at the Olmsted Waste-to-Energy Facility is the preferred method for managing MSW, including but not limited to MSW collected or generated by Public Entities in the County.

The County has an approved Designation Plan, and is moving forward with adoption of a Designation Ordinance. Implementation of designation will create equity, and detour generators from taking waste to less expensive landfills.

The vision of the Solid Waste Division is to be a fiscally responsible, fee-for-service, solid waste system that manages acceptable waste above ground while meeting or exceeding all environmental standards.

The Solid Waste Division's nine primary strategies, with performance measures, targets and corresponding initiatives that will be implemented to achieve them are included in Section 8.0). The initiatives address objectives such as resource conservation, groundwater protection, toxicity reduction, fostering an environmental ethic, processing waste to create green energy, compliance with the solid waste hierarchy, and economic

sustainability. Current practices and issues were evaluated and feedback was received from various groups. Additional information about the process of developing the Solid Waste Management Plan Update and public involvement is provided in Section 9.0.

C. WASTE SYSTEM BUDGET

One of the Solid Waste Division's strategies to achieve its mission is to demonstrate sound fiscal management. To do this, no general revenue funding is used to fund any of the solid waste management programs. The County's revenue sources include tipping fees, the sale of steam and electricity, and the sale of recyclable materials. It is the County's intent to continue this user-funded system. The cost for an average household is roughly \$18.00/month (this does not include hauling charges). A detailed estimate of the projected Solid Waste Division revenues and expenses for the 10-year planning period can be found in Section 5.0. Additional budget information can be found in the Financial Forecast - Attachment B.

D. GOALS FOR SOLID WASTE PROGRAMS

The County has established solid waste abatement goals for a 10-year period. Olmsted County's 10-year goals are contained in the Goal-Volume Table in Attachment A. Olmsted County intends to process at least 90% of all waste in some form prior to landfilling. This will be done by reducing waste; recycling marketable materials; producing a useful and marketable product from the non-recyclable portion of the waste stream; reducing, or eliminating the organic pollutants present in the waste being processed (and eventually landfilled); and by stabilizing, to the maximum extent possible, the inorganic pollutants present in the waste stream.