

Chapter 4

WASTE PREVENTION AND REDUCTION

This chapter describes state and local waste prevention policies. Examples are given to illustrate the evolution of policies and practices aimed at reducing both the volume and toxicity of wastes. The rest of the chapter describes current waste prevention practices in Clark County and more opportunities to use waste prevention as a solid waste management strategy.

Background

Waste prevention is a strategy that involves altering manufacturing of products or consumer behavior in purchasing, using or reusing products. Waste prevention reduces waste at its source, thus eliminating the need for recycling, composting and disposal. The best approach to solid waste management is to eliminate waste in the first place. Waste prevention and waste reduction reduces the need to develop, finance and maintain collection, transfer, processing and/or disposal systems. These benefits make waste prevention the highest priority for management of solid waste in Clark County and Washington State.

Waste prevention is sometimes referred to as “source reduction,” because it reduces or eliminates waste or pollution at the source. All waste generators have at least some opportunities to use waste prevention measures that reduce the generation of waste materials. Donating an unwanted computer to a charity is an example of waste prevention. So is photocopying on both sides of a sheet of paper. Altering material specifications so that fewer hazardous elements are used to make a product is another form of waste prevention.

Product stewardship, also known as producer responsibility, is a strategy designed to address the environmental impacts of products through their entire life cycle incorporating the concepts of waste prevention, extended life of a product, reuse, recycling and disposal. Under product stewardship, the entity that designs, produces, sells, or uses a product takes responsibility for minimizing the products’ environmental impact throughout all stages of the product’s life cycle.

Businesses and individuals can examine their purchasing of marginally needed or slightly used products as a way to save money and reduce waste. Consumers can exercise control and be thoughtful to help reduce waste, conserve resources, and save energy. Taking reusable bags to the store and carrying water in a reusable container are examples of simple strategies that would both reduce resources used.

Preventing the generation and disposal of waste involves increasing product life; decreasing the amount of material and natural resources used to make the product and/or its packaging; reducing the toxic ingredients in the product; reducing product use and consumption; and increasing the on-site management of some materials, such as organic wastes. Market forces often have the greatest influence on product life and packaging. When consumers change their buying habits, this can drive markets and influence how the commercial and industrial sector produces, ships and sells its goods. For example, consumers can tell manufacturers in writing, by phone or via the Internet when they are happy or displeased with a product or a particular type of packaging. If enough consumers stop buying a product because of its package, manufacturers are likely to notice and institute changes. Product design for disassembly and reuse has already become the standard in many European countries and is one of the goals of a product stewardship program.

The best approach to solid waste management is to eliminate waste in the first place.

The county and cities will continue to support and fund programs which provide a number of opportunities to educate students, educators and the community about waste prevention. The County and cities will also support non-governmental agencies willing to take the lead in business waste prevention assistance. Businesses may be more responsive to solid and hazardous waste management information and assistance delivered by a non-governmental agency, dedicated to business assistance and economic development. The Clark County **Green Business** program provides waste prevention assistance to businesses through waste audits and resource information.

Programs are coordinated with other local, regional and state campaigns in order to ensure uniform messages and maximized resources. The Portland Metro area, Seattle-King County area and State of Washington all provide opportunities for the County and cities to partner on waste prevention campaigns.

Assessment of Conditions

A number of waste prevention activities are occurring in Clark County. These activities can be discussed in two categories: residential and commercial/institutional. Although many waste prevention activities apply to both the residential and commercial/institutional sector, in general, in-home waste prevention behaviors are more difficult to instill, because individual preferences, personal convenience and income levels affect behavior more at home than at work.

Residential Waste Prevention

The Washington Department of Ecology provides local governments, including Clark County, with grants to promote waste prevention and recycling. These grants require local matching funds. The current grant program is referred to as the "*Co-ordinated Prevention Grant Program*." Although the primary focus of many county and city solid waste management education programs is recycling education, waste prevention is still a component; especially when it comes to residential yard debris management. The County uses the results of the *Waste Stream Analysis* to determine target generators and waste streams for waste prevention education. Waste prevention programs and campaigns that address residential waste are listed below. Many of the County programs (including statewide *Product Stewardship Programs*) are discussed in Education Promotion, Chapter 5.

- **The three core program initiatives** (**Green Neighbors**, **Green Business** and **Green Schools**) all have significant waste reduction and waste prevention components in their activities, information and assessments. The Green Neighbors website has an interactive house with information on how to reduce consumption, toxicity and waste generation;
- **Leaf collection programs** are available in the cities and the unincorporated areas of the County as a method to promote the use of leaves as mulch and compost;
- **The Master Composter/Recycler program** trains outreach volunteers, offers workshops and provides backyard composting demonstration sites as a way to reduce yard debris and food waste from entering the waste stream;
- **A Recycled Arts Festival** provides education and information about reuse and waste reduction, as well as provides the opportunity to purchase art made from recovered or reused items;
- **The Master Gardeners program** provides information on working in the yard and garden without using chemicals that could be harmful to people, animals and the world around them. This is done through brochures, lectures, community workshops and informational displays;
- **Residents learn about donating reusable items** through outreach such as *Do It Yourself Fairs*, *Green Neighbors* website and web information for the location of non-profit agencies;





- ***2goodztoss.com* is a website** for businesses and households. This website allows the opportunity to give away (or sell for up to \$99) unwanted items that could be of use to someone else. Coordinated through the Washington Department of Ecology with other counties throughout the state, the site tracks the number of successful exchanges as well as provides an estimate of the weight of those items kept out of the landfill. The County continues to provide technical assistance consultations for businesses to improve their waste reduction, recycling and sustainable practices through its Clark County Green Business Program and specific requests for technical assistance;
- ***WasteBusters* program** is a waste reduction competition between families.

Despite all these valuable and popular programs, significant opportunities still exist for residential waste prevention. In comparing the 2012 Waste Stream Analysis to the 2008 study, there were some increases and decreases in the percentage amounts for some materials with an overall 5% decrease in the amount of recoverable materials in the waste as compared to 2003. The Paper category shows a decrease; Plastics, Metal, and Glass remain the same; Organics, Wood and C&D have increased. The amount of aluminum beverage cans remain unchanged. Food waste shows a significant increase. A more detailed discussion of the waste stream composition is in the Waste Stream Analysis is in Appendix I.

Residential Waste Prevention - Moderate Risk Waste

Clark County implemented its first residential waste prevention promotion and education campaign in 1991 - 1992, with the financial and technical support of the Washington Department of Ecology. Ecology has continued to provide local governments, including Clark County, with grants to help promote waste prevention and recycling. These grants require local matching funds. The current grant program is referred to as the "Coordinated Prevention Grant Program." Waste prevention programs and campaigns that address household hazardous waste and moderate risk waste include:

- **Waste reduction displays** are presented at fairs and events;
- **Interactive displays** were developed on the topics of Waste Reduction, Natural Gardening, Stormwater, Transportation and Wastewater Treatment; and,

- **The Naturally Beautiful Backyards program with the Master Gardeners** provides information on working in the yard and garden without using chemicals that could be harmful to people, animals and the world around them. This is done through brochures, lectures, community workshops and informational displays.



Other Public Information

A wide variety of educational media and outreach approaches have been used in Clark County to ensure ongoing education includes moderate risk waste programs and toxics reduction. The following are some examples of these education and promotional efforts.

RecyclingA-Z.com

Recycling A-Z is an on-line directory with a detail listing of places to take unwanted items. Through a contract between Recollect and the City of Vancouver, and working with input and support from all partner agencies and Waste Connections, Recollect manages the Recycling A-Z widget which can be placed on any partner website and the information can be easily updated on a regular basis. Access to the Recycling A-Z information has been expanded to include the use of a widget on the websites of any partner agency. The addition of a mobile app also makes the information more accessible and useful.

Web Site

The Clark County Solid Waste Program website has been updated and can answer questions about household hazardous waste and moderate risk waste. Many program brochures regarding the use and disposal of HHW are also available on-line. The County web site is www.clark.wa.gov/recycle.

Events and Promotion

County and city staff and its partners participate in community events and promotion efforts such as Earth Day, Clark Public Utilities Home and Garden Idea Fair, Sturgeon Festival, Watershed Festival, Clark County Fair, America Recycles Day, and Recycled Arts Festival.



Commercial/ Institutional Waste Prevention

According to the waste stream analysis conducted in 2012, approximately 51% of all disposed waste in the County came from non-residential generators. This includes commercial generators and self-haul loads to the transfer facilities. The waste stream analysis shows that recyclable paper, construction/demolition and wood wastes, food wastes, metals and yard and garden wastes are components of this waste stream that present additional opportunities for waste prevention and reduction.

Examples of commercial/institutional waste prevention activities that have been implemented in the county are as follows:

- **A Green Business Program** designed to assist business in six key environmental areas: waste reduction and recycling; toxics; stormwater; water and wastewater; energy and community engagement.
- **Commercial waste reduction and recycling technical assistance program.**

In addition to the above activities, Clark County government and other local agencies have conducted in-house waste prevention programs including:

- **A Green Purchasing policy;**
- **Environmental Management System:** EMS is a continual cycle of planning, implementing, reviewing and improving the processes and actions that an organization undertakes to meet its business and environmental goals. As a part of the EMS program, the County (Facilities and Public Works) and Waste Connections (Operations and all three transfer stations) has been certified ISO 14001.



The County has also worked with institutions to encourage waste prevention. Activities include the following:

- **SOS Program:** a school cafeteria composting program;
- **Classroom presentations, service learning projects and school environmental fairs** have been introduced to further promote waste prevention activities. Staff has also worked with instructors at Clark College and Washington State University Vancouver to help integrate waste prevention concepts into different business, industrial, biology, natural resource management and economics classes.

Recommendations

1. **Provide regional waste prevention and reduction education** and promotion programs for residential, institutional and commercial generators of waste. (4-2)
2. **Provide yard debris and chemical reduction programs** such as natural gardening and home composting. (4-3)
3. **Utilize partnerships with other regulatory agencies and representatives of the business community** to increase the visibility and accessibility of commercial assistance programs and the Green Business program. (4-3)
4. **Place emphasis on commercial waste reduction** through the Green Business program. (4-3)
5. **Investigate the potential for providing financial incentives** to encourage waste reduction among ratepayers. (4-2)

End Chapter 4

This page intentionally blank