Dear Reader:

2017 was another excellent year for the Local Hazardous Waste Management Program in King County. Our regional partnership continued to work thoughtfully and energetically to protect public health and the environment, and provide outstanding services to people who live and work in King County.

The 2017 Annual Report showcases our program’s activities and accomplishments over the past year. Select highlights include:

• Leading with Racial Justice. Thoughtfully and appropriately designed, delivered, and evaluated services to the diverse residents and businesses in King County, including forming new partnerships with community groups.

• Hazardous Waste Management. Protected human health and the environment by properly managing 3,374,577 pounds of hazardous materials and wastes from households and businesses in King County.

• Secure Medicine Return. Launched a convenient collection system for unwanted household pharmaceuticals, funded entirely by pharmaceutical manufacturers providing over 100 collection locations throughout King County.

• Collection Facility Improvements. Opened an improved collection facility in Factoria, and continued planning for service improvements in South King County.

We would like to acknowledge the dedication and hard work of program staff, along with our agency and community partners, in providing these services. Individuals involved in LHWMP’s work are deeply committed to making a difference, and to ultimately improving public health and the environment across King County.

Sincerely,

Lynda Ransley
Program Director
Local Hazardous Waste Management Program

Joan Lee
2017 Chair, Management Coordination Committee
King County Department of Natural Resource and Parks
Water & Land Resource Division
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The Local Hazardous Waste Management Program’s Management Coordination Committee (MCC) guides the program’s strategic direction. They set and oversee the program’s operating policies.

2017 MCC MEMBERS

Joan Lee, Chair
King County Water & Land Resources Division

Councilmember Hank Myers, Vice Chair
City of Redmond Council
Sound Cities Association

Susan Fife-Ferris
Seattle Public Utilities

Jeff Gaisford
King County Solid Waste Division

Darrell Rodgers, Ph.D.
Public Health - Seattle & King County

Lynda Ransley
LHWMP Program Director
Seattle Public Utilities

PROGRAM PARTNERS

King County Solid Waste Division
King County Water & Land Resources Division
Public Health - Seattle & King County
Seattle Public Utilities
Sound Cities Association

INTRODUCTION

THE HAZARDOUS WASTE PROBLEM

Many products that we use every day—including cleaning supplies, varnish, motor oil, oil-based paints, and pesticides—contain ingredients that are toxic, corrosive, flammable, or reactive. These products are considered hazardous because they can threaten the environment and human health.

Though the amount of hazardous waste coming from a single house or business may be small, the total amount from 2.1 million residents and more than 60,000 small businesses in King County can harm public health and the environment if not properly managed. Moreover, exposure to some hazardous products presents a risk even when they are used and disposed of properly.

The U.S. Environmental Protection Agency and Washington State Department of Ecology set stringent regulations for hazardous waste generated by manufacturers and larger businesses. Similar wastes generated in the home or by small businesses are the responsibility of local government.

OUR REGIONAL RESPONSE

Washington State directed local governments to ensure proper management of hazardous waste products. As a result, local agencies and governments established the Local Hazardous Waste Management Program (LHWMP) to manage these wastes in King County.

Mission

Our mission is to protect and enhance public health and environmental quality in King County by reducing the threat posed by the production, use, storage, and disposal of hazardous materials.

Vision

Our vision is that the Puget Sound region is the cleanest in the country – one free of hazardous chemical exposure.
HOW WE ACHIEVE OUR MISSION

COLLECTION
We provide convenient hazardous waste collection services for residents and businesses in King County. We operate four fixed collection sites, mobile collection events, and in-home collection services for seniors and residents with disabilities.

PREVENTION
We offer education, outreach, technical assistance, and financial incentives to reduce exposures to toxic materials where people live and work. We build our programs and make investments based on the needs of our ratepayer public. This involves encouraging the use of less toxic products and helping residents and businesses safely manage their hazardous materials.

POLICY
We promote systematic changes in the production, use, and disposal of hazardous materials to help ensure that chemicals and products are safe for people and the environment. We work to create change through policy and product stewardship initiatives.
PROTECTING THE ENVIRONMENT FROM HAZARDOUS WASTE

Hazardous products damage our publically-funded solid waste and wastewater systems when they are put in the garbage or poured down sinks or storm drains. Ultimately, these dangerous chemicals can infiltrate our groundwater and contaminate Puget Sound, rivers, and lakes.

LHWMP’s goal is to reduce the amount of hazardous materials that ends up in our waste systems and the environment. We do this by providing ratepayers a convenient way to get rid of their hazardous wastes.
In 2017, LHWMP’s collection services kept more than **3,045,500 pounds** of hazardous waste out of our waste systems and the environment.

We operate four fixed facilities located in north Seattle, south Seattle, Auburn, and Factoria. Our roving Wastemobile travels for collection events throughout King County. We also provide in-home collection for seniors and residents with disabilities. Because our services are largely funded by ratepayers in King County, we do not charge a fee at collection sites.

**Visits by residents:** 59,936

**Visits by small businesses:** 1,056

**Home collection visits for seniors and residents with disabilities:** 95

#### What happens to hazardous wastes collected by LHWMP?

- **<1% Other**: 7,431 lbs.
- **1.5% Diverted for reuse**: 47,037 lbs.
- **4.2% Treatment** *(neutralizing acids or bases and disposing)*: 128,541 lbs.
- **4.5% Landfill**: 137,020 lbs.
- **24% Recycling**: 730,502 lbs.
- **26.3% Incineration**: 800,108 lbs.
- **39.2% Energy recovery** *(used as alternative fuel)*: 1,194,997 lbs.

#### Top wastes kept out of the environment

- Liquid pesticides
- Paint related materials
- Flammable liquids
- Motor oil
- Oil-based paints
- Antifreeze

#### Collection sites

- Auburn
- Enumclaw
- Renton
- Snoqualmie
- Sammamish
- Carnation
- Kirkland
- Bellevue
- Kirkland
- Bothell
MORE RATEPAYERS ARE USING OUR COLLECTION SERVICES

In the past five years, an increasing number of residents and businesses have utilized our collection services. We have continued service-level analysis to ensure that we provide hazardous waste collection opportunities for all King County ratepayers—including those living and working outside of the range of the fixed sites and those with limited mobility.

The new household hazardous waste facility at the Factoria Recycling and Transfer Station opened to the public in September 2017. This expanded, state-of-the-art facility has the capacity to effectively serve the growing population in east King County.

PARTNERING TO INCREASE COLLECTION OPPORTUNITIES

LHWMP provides financial grants to 31 cities and one tribal partner to help more residents properly dispose of toxic materials. LHWMP grants are combined with city and tribal funds to support collection events for limited types of household hazardous waste and recyclable solid wastes.

Some city data is not submitted at the time annual reports are published. Customer counts and volume data includes what was received by the date of publication, plus any unreported data from the previous year.
In October, the Northwest Chapter of the North American Hazardous Materials Management Association presented LHWMP and Mary’s Place with the Public Private Partnership award in honor of their product recycling efforts.

**SPOTLIGHT**

**Partnership with Mary’s Place**

Hazardous waste collections are often seen as the “last stop” for household chemicals, but LHWMP works to maximize opportunities for reuse.

In 2017, LHWMP connected with Mary’s Place, a nonprofit serving homeless women and families, to divert cleaning supplies to community members in need. Throughout the year, LHWMP redirected 1,200 pounds of usable cleaning products to Mary’s Place. Mary’s Place uses the products to clean their seven shelters. They also distribute supplies to their clients, who are transitioning into permanent housing.

In 2018, LHWMP will continue to build partnerships with local nonprofits and expand product recycling efforts.
PREVENTION

REDDUCING EXPOSURE TO TOXIC MATERIALS

Hazardous materials are all around us. They are in the products we use to do our jobs and take care of our homes.

LHWMP aims to reduce the risk of chemical exposures by helping residents and businesses safely manage hazardous materials and make safer product choices. We use a research-based, customer-focused approach to inform our planning, investments, and services.
AT WORK

WHAT WE OFFER: LHWMP provides on-site consultations, phone advice, and trainings for businesses. We help them manage hazardous materials, find safer product alternatives, comply with regulatory requirements, and reduce waste. We also provide financial assistance and recognition programs to help businesses make improvements that protect workers and the environment.

Helping Businesses Protect Workers and Manage Hazardous Materials

Small businesses in King County can call the business hotline to receive free expert advice on how to manage or dispose of hazardous materials. Businesses can also call to request an on-site consultation from LHWMP staff.

LHWMP developed a risk-based method for extending our on-site consultation services. We take into account potential service gaps, environmental risks, and equity considerations. Based on these criteria, LHWMP prioritized outreach to businesses in Algona, Black Diamond, and the area served by the Hanford Combined Sewer Overflow. We also continued to respond to all service requests throughout King County.

In 2017, LHWMP provided 531 on-site consultations to 418 small businesses in King County.

162,957 lbs. of hazardous materials moved to proper storage or disposal.

1,529 people attended 10 educational events.

2017 business visits

Most frequently visited business types

- Property management
- Retail
- Auto repair shops
- Educational facilities
- Wholesalers/distributors
- Construction and specialty contractors
FINANCIAL ASSISTANCE FOR BUSINESSES

In 2017, LHWMP provided 83 businesses with financial assistance to make improvements that protect workers and the environment from hazardous product use, storage, or disposal. By making a one-time investment, we create lasting change.

83 financial vouchers approved
$192,292 total cost of improvements
$39,542 reimbursements by LHWMP
600% return for every $1 LHWMP spent, small businesses invested $6

AN EXPANDED ENVIROSTARS PROGRAM

LHWMP launched the EnviroStars program 20 years ago, offering incentives and recognition to King County businesses for reducing hazardous waste and choosing safer product alternatives. This year, LHWMP joined with 16 other agencies to launch an expanded EnviroStars program, bringing regional green business recognition programs under one common umbrella.

“Customers love seeing the EnviroStars logo on our repair shops. And our employees feel a sense of accomplishment in doing the right thing.”

Dave Armstrong, Senior Facilities Manager, AAA Washington

Since the expanded program’s launch in September 2017, 143 King County businesses have registered in the EnviroStars web portal and 30 businesses have been awarded certification.

The expanded program better serves the needs of Washington’s small businesses. It provides them with a single, trusted source that they can turn to for recognition and resources related to green business practices.
Forty-nine of King County Housing Authority (KCHA) properties, about 50 percent, earned EnviroStars recognition in the classic program. Now, KCHA is building transition into the expanded program into their long-term sustainability planning.

The EnviroStars program framework has helped KCHA property owners make decisions that protect residents, workers, and the environment from hazardous materials. Examples include selecting safer paints, cleaning with safer products, reducing pesticide use, recycling fluorescent bulbs, providing hazardous waste collection and information programs for residents, and making sure that storm drains are protected.

“The more resources we save through environmentally sustainable choices, the more money we have to put back into these properties for our residents.”

Jenna Smith, KCHA Resource Conservation Manager
SWITCHING TO SAFER PRODUCT ALTERNATIVES

Some industries use hazardous materials that are particularly dangerous for workers, consumers, and the environment. LHWMP builds partnerships within industries, identifies safer product alternatives, and breaks down barriers that prevent businesses from switching to less toxic products.

**Dry Cleaning Shops**

In 2017, LHWMP developed a program strategy to help King County dry cleaners replace their PERC machines with professional wet cleaning equipment.

About 60 percent of dry cleaners in King County use PERC to clean their customers’ clothes. PERC is believed to cause cancer in humans. It can also be difficult and expensive to clean up if it gets into the environment. After evaluating various alternatives to PERC, we determined that professional wet cleaning is the safest option. Professional wet cleaning greatly limits chemical exposure risks, reduces energy consumption, and generates no hazardous waste. In developing a program strategy, we worked to understand barriers to and motivators for making the switch and learned from other programs across the country.

Launching in 2018, the pilot program will offer $20,000 grants to help five dry cleaners switch to professional wet cleaning. The results of the pilot will help inform a longer-term strategy, with the goal of eliminating the use of PERC use in dry cleaning in King County.

**Auto Body Shops**

In 2017, LHWMP collaborated with industry reps and local utilities to develop a program that will help auto body repair shops switch to using waterborne paints. Waterborne paints contain lower quantities of volatile organic compounds, which contribute to poor air quality and can harm workers’ health.

To inform program direction, LHWMP completed an extensive county-wide survey. This helped us understand the state of the auto paint industry, narrow our priority audience, and determine the best approach to assist shops with waterborne paint conversion.

In 2018, we will partner with paint industry reps to offer technical assistance and grants that cover half the cost of conversion—up to $10,000—to help a limited number of auto body repair shops switch to using waterborne paints.
WHAT WE OFFER: LHWMP provides phone consultations, lead investigations, and educational efforts to reduce residents’ exposures to toxic chemicals. These services help residents safely manage the toxic materials that are present in most homes.

Practical Advice for Residents

LHWMP’s customer call center connects residents to a hazardous waste expert who can answer their questions about product disposal and safer alternatives. We also partner with Seattle Public Utilities to fund the Garden Hotline. The Garden Hotline, operated by Tilth Alliance, provides practical advice on how to use less toxic chemicals for lawns and gardens.

13,882 questions answered by the Garden Hotline for 7,955 customers:
- 2,081 phone calls
- 846 social media and email inquiries
- 5,028 individuals at classes and events

Garden Hotline staff also presented at 142 classes and events, prioritizing service delivery to underserved populations and to King County residents outside Seattle. Highlights included classes at:
- Atlantic Street Family Resource Center
- East African Elders Group
- El Centro de la Raza
- Filipino Community Center
- Full Life Care, Rainier Valley and Kent
- Hopelink
- Labateyah House (United Indians of All Tribes)
- Neighborhood House
- Rainier Beach BAAMfest
- Rainier Beach Urban Garden
- Solstice Behavioral Health Center
- Umojafest
- Vashon Fruit Club
- Many other events throughout King County

The Garden Hotline offers practical, safe, and effective solutions to garden problems.
Childhood Exposures to Lead-Based Paint

Lead from paint in older buildings is one of the most common causes of lead poisoning. Lead-based paint was banned in 1978 but over 55 percent of housing units in King County may contain lead-based paint. In 2017, LHWMP worked with the Washington State Department of Health to investigate 313 cases of children with elevated levels of lead in their blood and provide support for many of their families.

Ultimately, our goal is to prevent lead exposures from occurring in the first place. We have completed audience research and have begun testing a variety of intervention strategies to reduce children's exposures. LHWMP will team up with trusted community organizations to launch a pilot project in Ballard and Burien in 2018. This pilot will raise awareness and encourage behaviors—like dusting with a wet cloth and cleaning the floor with a damp mop—that keep children safe from lead exposure.

Encouraging Safer Cleaning Practices

Many people use chemical cleaning products in their homes. They often do not understand how to assess the hazards of cleaning products or how to safely use and store them. Exposure to chemical cleaning products can result in health effects such as asthma and dermatitis. Annually, about 4,000 people call the Washington Poison Center for exposures to cleaning products.

We are determining which behaviors put families most at risk. Based on our findings, we will develop behavior-change strategies to reduce exposures. We used an equity process to determine that we could have the greatest reach and impact by selecting the Spanish-speaking immigrant population as our target audience.

In 2017, we worked with Sea Mar, a community-based organization with deep ties to the Latino community, to conduct in-home inventories of chemical cleaning products. The results of the inventories will inform our behavior-change efforts in the coming years.
Latino Ambassador Project

LHWMP has a commitment to providing equitable and culturally competent services. In 2015, LHWMP launched the Latino Ambassador Project to learn more about cultural views, habits, attitudes, and beliefs about hazardous products and waste. The project is led by a group of ambassadors. They have deep ties to their community and a passion for learning and sharing information that keep families healthy.

In 2017, the ambassadors reinvented an outreach tool that helps Spanish-speaking residents understand product labels and choose safer products. Ambassadors tested messages and materials, determined the best outreach channels, and presented their findings to King County staff. Their work and findings will be the foundation for a broader educational campaign.

This project utilizes a community-centered decision-making model that follows King County and LHWMP cultural competency principles. Through this effort, we are creating pathways for community members to directly be involved in decision-making and outreach activities that inform future policies, programs, and practices.
POLICY

WORKING UPSTREAM

LHWMP works to improve policies and regulations that impact the creation, use, and end-of-life management of hazardous products. We work with partners at many levels of government. We also partner with other local, regional, and national groups to achieve change.

In our product stewardship efforts, we aim to shift the cost of end-of-life management of toxic and hard to handle wastes from ratepayers to the product manufacturers. Product stewardship encourages manufacturers to reduce waste, increase recyclability of their products, and reduce the toxicity of their products.
SPOTLIGHT
Revising Occupational Lead Standards

In 2017, the Washington State Department of Labor & Industries (L&I) released a draft update to the state’s occupational lead standards. LHWMP’s advocacy was a major factor in L&I’s decision to update these outdated regulations. If adopted, the standards would be the most progressive in the nation and are a major step forward in worker protection.

The current lead exposure regulations were created in the 1970s, before scientists discovered that low-level lead exposures put workers and their families at risk. The hazards of low-level occupational lead exposures came into the spotlight in 2012, after an outbreak of workplace lead poisoning in Bellevue.

Following the outbreak, LHWMP worked with Dr. David Fleming, former director of Public Health - Seattle & King County, to petition Governor Jay Inslee and L&I to update Washington’s regulations. LHWMP also presented a series of recommendations and drafted a resolution in support of strengthening lead standards that King County Board of Health adopted. L&I opened the rulemaking process and released a draft of its updated rules in 2017.

The update to these rules would protect thousands of workers in Washington who may be exposed to lead at their workplaces. LHWMP will continue to work closely with L&I to support the adoption of this progressive standard.
LOCAL POLICY SUCCESS
The Secure Medicine Return Program

LHWMP worked with the King County Board of Health to pass the Secure Medicine Return Regulations in June 2013. LHWMP successfully implemented the regulations, making King County the first county in the nation to have a drug-industry funded and operated stewardship program to collect and safely dispose of unwanted household medicines.

The Secure Medicine Return program became fully operational in 2017, with 102 medicine drop boxes installed at participating pharmacies, clinics, and law enforcement offices. Mail-back envelope distribution locations are also available at 18 sites. These mail-back envelopes are provided directly to residents with limited mobility.

“We’re making it safer and easier to get unused and expired medication out of medicine cabinets, out of our landfill, and out of Puget Sound. The secured drop-boxes we’re installing throughout King County will reduce fatal overdoses and help stem the growing tide of addiction.”

Dow Constantine, King County Executive

This medicine take-back program aims to decrease the risk of drug abuse, accidental overdose, and preventable poisonings. Public Health - Seattle & King County and LHWMP oversee the program to ensure compliance and safety. LHWMP also provides outreach and education to residents about safe storage and disposal of unwanted medicines.

QFC Leadership at the launch of the first medicine return drop box at the Capitol Hill QFC in Seattle
FINANCIALS

FINANCIAL REPORT

2017

LHWMP received $16,211,923 in revenue during 2017, primarily from fees on solid waste and sewer services. These fees, which apply throughout King County, are authorized by the King County Board of Health under King County Board of Health Code 11.04.060. Fees are collected by public and private utility providers [i.e., solid waste haulers, wastewater treatment plant operators, transfer station operators, and cities], which in turn pay them into the program.
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| TOTAL REVENUES | $32,608,596 | $16,211,923 |

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| TOTAL EXPENDITURES | $38,727,788 | $15,392,967 |

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*Coordinated Prevention Grant, Washington State Department of Ecology*
Local Governments Working Together for Health and the Environment

Local Hazardous Waste Management Program in King County, Washington

150 Nickerson Street, Suite 204, Seattle, WA 98109
206-296-4692 | HazWasteHelp.org

Alternative formats available: 206-263-1650 | TTY Relay 711