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Dear Reader:

We are pleased to share our 2021 Annual Report. This report reflects the work of our staff and partners in fulfilling our mission: to reduce human and environmental exposures from hazardous materials. In a year filled with uncertainty, we remained committed to effective and equitable service in support of our mission.

While the mission never wavers, the ways we approach it evolve to meet the constantly changing needs of our ratepayers.

In 2021, we applied an anti-racism focus, both proactively and responsively as an organization. Collaboration with cities, towns, and tribes bolstered the Program’s ability to meet the needs of ratepayers. We completed our update to our comprehensive Management Plan. This plan will guide our services for the next ten years. It emphasizes our commitments to racial equity, serving as policy change advocates, and continuing collaborative partnerships to make significant public health environmental change in King County and Washington.

In this report, we highlight some of the Program’s accomplishments from 2021, including:

- **Racial equity** – advanced the implementation of our Racial Strategic Equity Plan to improve design, delivery, and evaluation of our services as well as how we operate as a Program. We offered safety information online and in print in 22 languages, and 70% of events hosted by the Garden Hotline were located within, and designed to reach, communities of people who are Black, Indigenous, and people of color (BIPOC). Our business services also supported business owners and employees who experience disproportionate exposure to hazardous materials, supporting a diverse community of BIPOC-owned and operated small businesses.

- **Collection and disposal** – safely disposed of more than 3.3 million pounds of hazardous waste for residents and businesses. We provided $446,260 in grants to our city and tribal partners for hazardous materials outreach and collection events.

- **Residential services** – provided technical assistance to more than 2,000 people through outreach and education. Despite the challenges of connecting in the pandemic, we served our customers through 171 educational visits, 21 workshops and events, and outreach and education in 22 languages.

- **Business services** – provided 406 on-site consultations to improve management practices and use of safer products. The Program contributed $160,800 in reimbursements; for every dollar we spent, businesses invested $4 in adopting safer behaviors and products (up from $3 in 2020).

- **Research and policy** – partnered with communities and government agencies to promote and pursue systemic policy changes to help ensure chemicals and products are safe for the public and the environment. We helped lead the way for Washington to create a statewide medicine return program, and we met with staff from the Environmental Protection Agency to help shape their risk management practices as part of the Toxic Substances Control Act. We also shared our research on lead content in aluminum cookware, particularly pressure cookers used by Afghan refugee families, with the U.S. Food & Drug Administration and the U.S. Consumer Product Safety Commission. Our research on cookware is leading to federal-level conversations on safety standards.

- **Communication and marketing** – over 156,268 people visited the Program’s website and 15,967 people opened our newsletter. The Program launched phase 2 of our award winning “Ojo con el cloro” (careful with bleach) campaign with over 4.3 million impressions. The campaign video was viewed to completion 1.2 million times.

We acknowledge and thank our staff, agency, and community partners for their dedication and excellent work to make our community and environment safer. With their support, we strive to provide relevant, effective, and equitable services for our King County residential and business ratepayers now and in the years to come. We are proud of what we accomplished in 2021, excited for what’s already underway in 2022, and above all, thrilled about how this momentum can springboard us further over the next ten years with our comprehensive Management Plan in service to equitably reduce human and environmental exposures from hazardous materials.

Lynda Ransley, Director  
Hazardous Waste Management Program

Dr. Darrell A. Rodgers  
2021 Chair, Management Coordination Committee  
Public Health – Seattle & King County
The Hazardous Waste Management Program’s Management Coordination Committee (MCC) oversees the regional and multi-jurisdictional partnership of our Program. The MCC is a coalition of partners working together to protect public health and the environment from the risks posed by production, use, storage, and disposal of hazardous materials.

2021 MCC MEMBERS

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

Susan Fife-Ferris, Vice Chair
Seattle Public Utilities

Jeff Gaisford
King County Solid Waste Division

Joan Lee
King County Water and Land Resources Division

Councilmember Kevin Schilling
City of Burien
Sound Cities Association

PROGRAM PARTNERS

The Hazardous Waste Program is a regional partnership for all jurisdictions in King County. This includes 38 cities, two tribes, and King County unincorporated areas.

King County Solid Waste Division

King County Water and Land Resources Division

Public Health - Seattle & King County

Seattle Public Utilities

Sound Cities Association

INTRODUCTION

THE HAZARDOUS WASTE PROBLEM

Many products 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.

At the Hazardous Waste Management Program (Haz Waste Program), we are responsible for providing relevant, effective, and equitable services to 2.3 million residents and 60,000 small businesses. That means providing safe and reliable solutions to managing their hazardous waste.

Therefore, we strive to protect and enhance public health and environmental quality in King County – as we have for 30 years – by reducing the threat posed by the production, use, storage, and disposal of hazardous materials. We work to reduce hazardous exposures to people and the environment in King County through a three-tiered approach:

• **Policy** and product stewardship initiatives on the production, use, and disposal of hazardous materials.

• **Prevention** of exposures to hazardous materials by using safer products and practices.

• **Collection** services for hazardous wastes from households and qualified businesses.
OUR REGIONAL RESPONSE

Washington state directed local governments to ensure proper management of hazardous materials and waste. As a result, local governments across King County established the Hazardous Waste Management Program in 1990.

Now, after more than 30 years as community stewards, we are ready to face the future with an updated management plan that ensures the next 30 years will have an even greater impact on improving the health and safety of our community, especially for its most vulnerable and underserved residents.

OUR 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.

OUR 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

**POLICY**
Through policy and product stewardship initiatives, we promote systemic changes in the production, use, storage, and disposal of hazardous materials to help ensure that chemicals and products are safe for people and the environment.

**PREVENTION**
We offer education, outreach, technical assistance, and incentives to reduce toxic material exposures where people live and work. We use a research-based, community-centered approach to encourage the use of safer products and help residents and businesses manage their hazardous materials safely.

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

OUR RACIAL EQUITY VISION STATEMENT

We recognize that the social structures of racism multiply the effects of hazardous exposures. To address this inequity, we adopted a Racial Equity Strategic Plan to embed racial equity in all our work. We have a vision that: Race is not a determinant of hazardous materials exposure in households and businesses in King County.

To achieve this:

- Racial equity and environmental justice principles are embedded throughout Program operations.
- The Program recognizes and reflects the racial diversity of the ratepayers it serves.
- We actively engage and partner with others to understand and address racism and utilize culturally relevant data to inform our work.
BUILDING PARTNERSHIPS, DRIVING CHANGE

As community stewards, we work to enact legislative remedies and improve policies and regulations that impact the creation, use, and end-of-life management and disposal of hazardous materials. The program focuses on shifting the burden of preventing exposure away from individuals to the systems and producers that create hazardous products and wastes.

OUR STATE AND FEDERAL POLICY EFFORTS

Protecting the earth, our families, and our collective future depends on group and individual support, cooperation, and accountability. At the Haz Waste Program, we strive to make communities safer by building partnerships and working with many levels of government. Below are examples of policy success stories in 2021.

SECURE MEDICINE RETURN PROGRAM

King County’s Secure Medicine Return Program was the first of its kind, and we started a wave! Other counties and states began to follow King County’s example and created their own county-wide or statewide medicine return program. The momentum led the Washington state legislature to enact a statewide program, called the Safe Medication Return Program. The program, operated by Washington State Department of Health, launched in November 2021. The program includes both a mail-back option and convenient drop-off locations across the state.

We are excited to join the statewide program, and we are proud to share the statistics from the King County program from 2016 through 2021:

• Protected families and communities from preventable poisonings, drug abuse, and overdose by disposing of more than 115 tons of prescription and over the counter medications in five years.
• Worked with 430 drug producers participating in King County’s drug industry funded product stewardship program.
• Placed 198 drop-boxes throughout King County to safely dispose of unwanted medicines, provided in-language materials, and provided mail-back options for people who could not easily access a drop-box to safely dispose of unwanted medicines.
SAFER FABRIC CLEANING PROGRAM

Traditional methods of dry-cleaning use hazardous chemicals. Safer alternatives are available, but it takes time and money to explore the options and convert a dry-cleaning operation to new equipment, materials, and methods. That’s why we established a financial incentive program in 2018 to switch dry cleaners who use perchloroethylene (PERC) as their dry-cleaning solvent to professional wet cleaning (PWC), which uses water and detergent. The first program of its kind in the state, King County’s “PERC-Free King County by 2025” program switched 30 King County dry cleaners to PWC in two years! The Washington Department of Ecology saw the success in King County and adopted the program state-wide in 2021, offering a $40,000 voucher available to all PERC dry cleaners that make the switch.

Our dry-cleaning work also received national recognition in 2021 with an article published in the international peer reviewed journal, *Frontiers in Public Health*.

SUPPORT OF THE TOXIC SUBSTANCES CONTROL ACT

We work to influence the U.S. Environmental Protection Agency’s (EPA’s) implementation of the Toxic Substances Control Act (TSCA). TSCA is the United States’ primary chemicals management law and it helps ensure that the chemicals manufactured and used in this country are safe for people and the environment. In 2021, our policy staff met with EPA staff to help shape its risk management actions on chemicals that are widely used in King County. We also provided testimony at the national EPA Equity and Social Justice session and emphasized the need to include the community in future decision-making and to provide financial assistance for small businesses to adapt new, safer technologies. Additionally, we partnered with several states, local governments, and non-governmental organizations across the U.S. to create the State and Local Agency Statement on EPA Risk Evaluation and Management under the TSCA. This statement expresses support for EPA’s new path forward on TSCA risk evaluations and includes recommendations regarding EPA’s approach to regulation of chemicals.
PREVENTION AT HOME

We provide equitable outreach, education, and in-home investigations to help residents safely manage the hazardous materials present in most homes and to find safer alternatives.

Our prevention activities include:

- Offering safety information online and in print in 22 languages.
- Assisting residents through the Hazardous Waste Help Line by connecting residents to experts who can answer their questions about product disposal and safer alternatives.
- Hosting educational workshops to teach community members practical information about household hazardous products.
- Partnering with community organizations, city, and Tribal partners to raise awareness about safer alternatives, safe use and disposal of household hazardous materials in-language and in-culture.
- Visits to families with children who have an elevated blood lead level (EBLL) to identify the source of lead and connect them to services.
- Partnering with Seattle Public Utilities to fund the Garden Hotline, which provides phone and email advice on how to use fewer hazardous chemicals for lawn and garden care. Garden Hotline staff also present at classes and events, prioritizing service delivery to under-served populations and King County residents living outside Seattle.

171 educational visits
21 workshops and events
2,065 people reached through Residential Services outreach and education
128 Elevated Blood Level (EBLL) visits
178 closed EBLL lead cases
3,668 calls to the Haz Waste Line

Attendees at Garden Hotline events:
3,389 people at 361 events,
70% within communities of people who are Black, Indigenous, and people of color (BIPOC)

4,990 customers served through the Garden Hotline
HELPING AFGHAN FAMILIES REDUCE EXPOSURE TO LEAD

In 2018, Public Health – Seattle & King County and the Haz Waste Program formed a Public Health Partnership to support families in reducing their children’s exposure to sources of lead in the home. Our commitment to anti-racism and equity includes welcoming Afghan refugees and addressing the human health impacts of hazardous materials that they may face. We work across departments to offer services including in-home lead assessments, sample collections, nutritional and developmental screenings, and referrals to community resources.

Sharon Cohen, a health and environmental investigator with the Haz Waste Program, visits homes with a community health advocate and works with families to help them understand the harmful effects of lead. She first interacts with them virtually and asks questions to find out whether products known to contain lead (such as eyeliners, spices, and cookware) are present in the home. If these are present, she visits the homes along with an Afghan community health advocate to test the products through the use of an X-ray Fluorescence (XRF) screening tool. While in the home, she also collects samples of potential sources of lead exposure to take to a lab for testing. Safe COVID-19 distancing protocols are in place for every in-home visit.

“Families are so thankful for the help we provide and the information we share with them about lead and health impacts. I really enjoy the work I do because we get to meet with people and help create a better environment for them to live in,” said Sharon. “Building trust with people is key, and by working with our community health advocates and other partners, we are really able to reach people where they are and provide the support they need.”

One of the emerging sources of lead is aluminum cookpots and pressure cookers. The Public Health Partnership created the Safer Alternatives Cookware Exchange and works with families to remove items found in the home known to contain lead, such as aluminum pressure cookers and cookpots, for further testing by our research services team. The families receive stainless steel cookpots as replacements, which have very low lead levels and are safer to cook with.

For some families, their traditional aluminum pressure cookers may have sentimental value, as the cookware is passed down by family members or received as a wedding gift, and they prefer to keep the item. In these cases, we advise the family to store the item or place it on display, but not to use it for cooking.

Although interventions with the Afghan community were limited in 2021 because of the COVID-19 pandemic, we found ways to share information with the community through virtual home visits and tested for lead at homes through socially distanced in-home visits. In 2021, we provided stainless steel replacement cookware to 38 families of Afghan children who use Afghan pressure cookers or other aluminum cookpots and have children with elevated blood lead levels (EBLLs).

Since 2018, we have generated data that characterizes lead content in cookware and the potential for lead to migrate into food. We recently shared our data for these cookpots with the Food & Drug Administration (FDA) and the U.S. Consumer Product Safety Commission (CPSC). As a result of King County’s leadership on this issue, federal-level conversations are now underway.
PREVENTION AT WORK

Safe management of hazardous products and waste is good business, and we offer small businesses education, outreach, technical assistance, and incentives to help make improvements that protect workers, the community, and the environment from exposure to hazardous materials. In particular, our Business Services support business owners and employees who experience disproportionate exposure to hazardous materials.

Our Business Services include:

- Guidance through in-person visits, phone calls, and emails.
- Cost-sharing for equipment that prevents or controls spills or that replaces hazardous products with safer alternatives.
- Trainings, tools, and online and printed information.
- Industry-focused campaigns to switch to safer alternatives, safer storage, and safe use practices.

406 consultations
in King County

3,829 lbs.
hazardous materials
moved into safe storage

85,810 lbs.
hazardous materials
disposed of properly

337 cost-sharing vouchers issued

$160,823.70
reimbursements by the Hazardous Waste Management Program

$603,602.69
total cost of improvements made by businesses

1:4
Return on investment for voucher program (up from 1:3 in 2020)
USING SAFER DEGREASERS AT WORK

Traditional degreasers can contain hazardous chemicals, including EPA-listed Hazardous Air Pollutants (HAPs) and carcinogens. These degreasers can harm the environment, the health and safety of workers, their families, their customers, and potentially the communities who live near where these chemicals are used.

To help reduce exposures to some of the worst chemicals used in degreasing, we launched the Degreaser Pilot Project in 2021. This project provides outreach and support to small businesses to help them switch to safer degreaser products and equipment. We start each small business interaction by first recommending EPA-certified Safer Choice products and equipment. If those products do not work for a specific business, our staff recommend water-based degreasers. If neither of those types of products work for a business, our business services and research services teams investigate additional safer alternative product options. Forty businesses participated in the pilot in 2021, with an additional 10 businesses planning to join in 2022.

For example, during a visit to an auto shop, business services field consultants provided several safer alternative degreaser trial products to improve the safety of the employees and customers at the auto shop by letting the business try new products without having to buy anything. The owner was surprised at how difficult it was to discern the hazardous products from the safer alternatives because the canisters looked very similar. The business owner was grateful for the educational training and sample products that he received. He stated that he now understands the importance of reading the labels to look for hazardous chemicals.

Another business expressed interest in an ultrasonic parts washing unit to replace his current solvent degreaser and improve their industrial work environment. The owner was contemplating the purchase of the cleaning equipment but never had the support or resources. The business services field consultant evaluated the situation and provided a voucher worth $5000 to assist the machine shop with purchasing the equipment. The field consultant will follow-up with the business with some additional information about using the ultrasonic parts cleaning method and to ensure the voucher is used before the expiration date.

Businesses who have participated so far are encouraged by the experience. One owner shared, “I would tell other businesses that is it better to be safe than sorry, and to go ahead and try a safer alternative. But don’t stop at one product. It’s good to try multiple safer products. Give it a shot. You have to allow time to see how it works, so don’t just try it once and drop off.” While another said, “I plan to switch because the trial products worked well for me. I am also interested in the voucher program to potentially purchase a bulk system.”
KEEPING HAZARDOUS MATERIALS OUT OF THE ENVIRONMENT

Hazardous products damage our public solid waste and wastewater systems when they are put in the garbage or poured down sinks or storm drains. Ultimately, they can enter our groundwater and contaminate Puget Sound, rivers, and lakes. We provide ratepayers with safe and convenient ways to get rid of their hazardous waste to reduce the amount of hazardous material that end up in our waste systems and the environment.

We provide our collection services through three permanent locations (fixed facilities), a Wastemobile collection event held every weekend in Auburn, and traveling Wastemobile collection events to equitably serve communities throughout King County. We also provide in-home collection services for seniors and residents with disabilities. We do not charge a fee at any of our collection locations because our services are largely funded by ratepayers in King County.

We also educate the public about safe disposal practices and options—both our own services and options provided by collection providers such as product stewardship organizations, retailers, other public agencies, and state-permitted private treatment and disposal facilities. We especially focus on reaching people who use languages other than English, younger audiences who may not be aware of the collection services, and people who are Black, Indigenous, and people of color (BIPOC).

In 2021, the Hazardous Waste Management Program’s collection services kept 3,358,620 pounds of hazardous waste out of our waste systems and the environment.

“My favorite experience this year was going on a home collection for an elderly community member. It’s great to see how happy it makes them for us to be able to come out and pick up their hazardous waste.”

Mo Wallace
Environmental Field Specialist,
North Seattle MRW Collection Facility

71,352 visits by residents
827 visits by small businesses
PARTNERING WITH CITIES, TOWNS, AND TRIBES FOR SAFE AND CONVENIENT COLLECTION

Doing our work through an equity lens means investing in communities and supporting and respecting their chosen leadership. Therefore, we value partnership and investment strategies. In fact, we provide financial grants serving 36 cities and the Snoqualmie Tribe to help more residents safely manage their hazardous materials. Grants are combined with other funding sources to support education and collection events for limited types of household hazardous waste and recyclable solid waste.

$446,260.37 funds provided to city and tribal partners

Number of attendees to city-sponsored events: 24,313

39 city/tribal-sponsored collection events

Pounds of waste collected at city-sponsored collection events: 100,100 lbs
Looking Forward

Meeting the Challenges of Today to Protect Our Future

For 30 years, we have worked to protect and improve public health and environmental quality in King County. However, there’s still more work to do. Hazardous material exposure is a significant problem that continues to affect our communities, residents, and businesses.

In 2021, we updated our Management Plan to provide guidance for the next decade. The Plan recognizes that we need to focus our efforts on building momentum for systems changes that promote safer alternatives and remove exposure to hazardous products. By understanding the underlying causes of human and environmental exposures, we can identify key priorities and design approaches that create lasting change. We need to shift the burden of preventing exposure away from individuals to producers who create hazardous products. While pursuing policy and system changes, we will continue to provide prevention and collection services across the country.

And so, the journey continues. Looking ahead, we remain committed to our mission, ratepayers, and our commitment to racial equity. Here are a few of our key priorities for 2022.

Extended Producer Responsibility

To protect people and the environment from hazardous materials, we will work to advance policy initiatives that hold producers responsible for managing their hazardous products when they become waste. One strategy toward this goal is expanding extended producer responsibility (EPR).

EPR is a mandatory type of product stewardship that requires the producer to take responsibility for safe disposal of its products. Building up EPR and product stewardship programs will help keep hazardous chemicals out of landfills and decrease exposure to hazardous waste substances, especially for those disproportionately impacted by exposures.

One such policy initiative is battery disposal. With the rise of smartphones, cordless appliances, and electric vehicles, people are using more batteries in their everyday lives. In turn, more batteries are entering our waste management stream. Batteries contain hazardous materials, and when they enter the waste stream without proper maintenance or disposal, they can cause harm to the environment and create multiple safety issues at waste management facilities. By requiring battery producers to take responsibility for the impact of their products on the environment, we can provide King County residents with safer, more convenient ways to dispose of them at end-of-life, as well as drive change for better product design.

In 2021, we supported the Battery Stewardship Bill (HB 1896). This bill would create a statewide, producer-funded stewardship program for batteries. Program staff served as chair of the Northwest Product Stewardship Council subcommittee that worked on the bill during 2021. Staff also testified in support of the bill before the House Environment and Energy Committee and the House Appropriations Committee.

The bill did not pass in the 2022 legislative session but is well positioned for the 2023 session. To that end, we will continue our work with local and state government partners, Zero Waste Washington, the Northwest Product Stewardship Council, and Representative Harris-Talley to support the battery bill when it is up for consideration in 2023.
INFLUENCING CHEMICAL REGULATIONS TO PROTECT OUR LOCAL COMMUNITIES

We are committed to reducing the use of hazardous materials in homes and businesses. Our team engages in local, state, and federal regulatory actions on chemicals such as the Washington State Safer Consumer Products Act, the Polyfluoroalkyl Substances (PFAS) Chemical Action Plan, and the federal Toxic Substance Control Act (TSCA). Our work includes meeting with regulators and providing comments and testimony to ensure that these regulations are protective of our unique local communities and environment.

SERVE COMMUNITIES IN-LANGUAGE AND IN-CULTURE

We will continue to serve our residential and business communities with resources and services that reflect their languages and cultures. Our 2022 work prioritizes providing hazardous material exposure reduction and support to adopt safer alternatives to all King County ratepayers with a focus on residential and business communities that are disproportionately impacted by hazardous materials exposure. We are providing visits to businesses located in historically underserved areas of our County and building relationships with community members and leaders in those areas. We will continue our focus on partnering with community-based organizations that serve disproportionately impacted residential communities.
VALUE FOR MONEY

The Hazardous Waste Management Program received $18,598,662 in revenue during 2021, 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 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), who then pay into the Program.

1 Washington State grant-Dept. of Ecology agreement was executed in November 2021. Local Solid Waste Financial Assistant (LSWFA) grant period covers July 1-2021-June 30, 2023 for $797,392.

2 King County’s year-end accounting adjustment.

| FUND BALANCE | 2021 Beginning | $15,074,632 |
| REVENUES | 2021 BUDGET | 2021 ACTUAL |
| Wastewater Rate Revenue | $3,590,648 | $3,603,601 |
| Transfer Station Rate Revenue | $2,641,046 | $2,835,904 |
| Solid Waste Account Revenue | $10,496,524 | $11,815,297 |
| Interest Income | $88,099 | $103,223 |
| Washington State Grants | – | $240,637 |
| TOTAL REVENUES | $16,816,317 | $18,598,662 |

| EXPENDITURES | 2021 BUDGET | 2021 ACTUAL |
| Seattle Public Utilities | $4,004,977 | $3,783,338 |
| King County DNRP, Solid Waste | $4,830,412 | $3,558,298 |
| King County DNRP, Water & Land | $7,646,984 | $5,834,001 |
| Public Health – Seattle & King County | $4,185,305 | $3,563,702 |
| City and Tribal Contracts | $952,893 | $442,602 |
| City and Tribal Event Inspections | $25,234 | $25,234 |
| Disaster Debris Contingency | $25,000 | $0 |
| TOTAL EXPENDITURES | $21,670,805 | $17,207,175 |

| FUND BALANCE | 2021 Ending | $16,332,332 |
| Net Revenues Over (Under) Expenses | | $1,391,486 |
| Year-End Accounting Adjustment | $(133,786) | |
| 2021 Ending | | $16,332,332 |