



**Local Hazardous Waste
Management Program
in King County**

Local Hazardous Waste Management Program 2010 Plan Update



This 2010 Plan Update was prepared by the Local Hazardous Waste Management Program in King County, Washington. The Program works 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.

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While each of the supporting contributors, reviewers and production staff members has made a contribution to this document, they are not responsible for its final content. Nor, by their contributions, are they endorsing it, either individually or on behalf of their agency.



Local Hazardous Waste Management Program in King County

150 Nickerson St., Suite 100 Seattle, WA 98109-1634 www.govlink.org/hazwaste

King County
Solid Waste Division

October 15, 2010

King County
Water and Land
Resources Division

Dear Reader:

Public Health Seattle
and King County

On behalf of the Management Coordination Committee of the Local Hazardous Waste Management Program (Program), I am pleased to present the Program's 2010 Plan Update. This Plan Update was approved by the King County Board of Health on April 15, 2010, and by the Washington State Department of Ecology on July 8, 2010.

Seattle
Public Utilities

Suburban Cities
Association

This 2010 Plan Update is the culmination of over a year of work by staff from the Program's Partner Agencies, which include Public Health - Seattle and King County; Seattle Public Utilities; King County Department of Natural Resource and Parks Solid Waste, and Water and Land Resources Divisions; and Suburban and Other Cities in King County. It includes public input through a variety of means such as workshops, interviews, focus groups, mail, e-mail, voice-mail and facebook comments.

Participating Cities:

Algona
Auburn
Beaux Arts
Bellevue
Black Diamond
Bothell
Burien
Carnation
Clyde Hill
Covington
Des Moines
Duvall
Enumclaw
Federal Way
Hunts Point
Issaquah
Kenmore
Kent
Kirkland
Lake Forest Park
Maple Valley
Medina
Mercer Island
Newcastle
Normandy Park
North Bend
Pacific
Redmond
Renton
Sammamish
SeaTac
Shoreline
Skykomish
Snoqualmie
Tukwila
Woodinville
Yarrow Point

It chronicles the Program's award winning work to protect public health and the environment from toxic and hazardous products, chemicals, materials and wastes. It describes our current efforts to address contemporary issues and problems. And the Plan Update envisions our future work to address the general public's interests about toxics, as well as serving businesses, and vulnerable and historically underserved populations.

Thank you for your interest in this document. If you have any questions or need additional information, please contact the Program's Administrator, Jay L. Watson, PhD, at (206) 240-5977 or jay.watson@kingcounty.gov.

Sincerely;

Jeff Gaisford, Chair
Management Coordination Committee

Executive Summary

This document updates the original 1990 Final Plan for the Local Hazardous Waste Management Program in King County (Program) and the 1997 Plan Update. It builds on those two documents and extends planning for the Program into the future. The Program is nearly twenty years old. Since it was launched, changes have occurred in the populations that we serve, the nature of hazardous products and wastes in the marketplace, and our knowledge about how to address those changes.

In summary, the major issues that the Program will continue to address, as well as the shifts that have taken place over the past decades, include:

- **Increased population, changes in the distribution of that population, and changes in the diversity of that population;** increased awareness that segments of the population are particularly **vulnerable** to toxic exposures, including children, infants, youth, pregnant women, and women of childbearing age; and increased awareness that segments of the population are **underserved**, such as the homebound, apartment dwellers, the disabled, impaired or activity limited, minority cultural communities, those who use English as a second language, or non-English speakers.
- The continuing need to **serve businesses and institutions that generate small quantities of hazardous waste**, but also the need to address the changing nature of some of those businesses which have rapid turnover in personnel, or have significant changes to their business model such that best management practices are hard to sustain.
- **Sharp increases in the number, type and complexity of hazardous materials, chemicals and products;** the need to be preventative and **work ‘upstream’** in the manufacturing process to reduce the toxicity of products in their production stage; and the need to **shift the cost burden** for the disposal of hazardous products from utility rate payers to the producers and users of those products.
- The fact that **education and voluntary efforts alone will not achieve the safe use, storage and disposal of hazardous chemicals, material, products and wastes.**

The 2010 Plan Update describes the steps that the Program has taken, is taking, and plans to take to address these major issues and shifts, and to carry out our mission. That **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.”** It concentrates our work in three activity areas:

- Reducing the threat in the **production stage**,
- During **use and storage**, and
- Providing proper **collection and disposal** of hazardous materials.

This mission is further articulated in goals that directly address the major issues and shifts described above. In summary, the goals further refine our efforts in reducing the production of hazardous materials and products; the use of, and exposure to, hazardous materials and products; public and environmental exposure to the most hazardous materials; the exposure of vulnerable and traditionally underserved populations to toxic and other hazardous materials; facilitating proper hazardous waste disposal; and managing the Program to be efficient, effective, and equitable for our ratepayers. This Plan Update describes the work that we are currently undertaking to address those major issues and shifts. We propose to continue that work, and to explore additional activities and approaches that we think may increase our effectiveness and thoroughness.

The Program is responding to the increased population, changes in the distribution of that population, and changes in the diversity of that population, by taking, and planning to take, a variety of actions. We have:

- Expanded collection and disposal services and increased service hours at the North and South Seattle hazardous waste collection facilities;
- Increased equity of access to our collection and disposal services by establishing regular Wastemobile collection service in South King County at the Auburn SuperMall and by shifting Wastemobile services from our fixed facility service areas to other areas in Northeast King County; and
- Established and extended our fee-free collection service to accept business waste at all of our hazardous waste collection facilities and the Wastemobile.

In the future, we plan to continue to offer these general services, and adjust them as needed. We also plan to expand general outreach about our collection services, and provide targeted outreach to the elderly, homebound, non-English-speaking residents, and historically underserved communities. We have budgeted funds in 2010 to undertake additional analysis of how to increase the use of our services by these underserved populations, and to make service adjustments in 2011 based on the results of that analysis.

To address the segments of the population that are particularly vulnerable to toxics, including children, infants, youth, pregnant women, and women of childbearing age, the Program has taken, and is planning to take, a series of actions. These actions include:

- Supporting schools, through our Healthy Schools and Art Chemical hazards projects, to identify and reduce hazardous materials and chemicals in use on their premises, in school labs, and in art classes; and educate teachers, students and parents about those materials;
- Working with child care facilities through our Young Children project to reduce the use of hazardous products and materials, and educate parents and facility workers about those products and materials; partner with other agencies and organizations to provide information to parents and others who work with children; and reduce children's exposure to lead; and
- Working on the elimination of bisphenol-A, mercury and use of pesticides through our Priority Chemicals, Pesticides, and other projects.

The Program's future efforts will include continuing to work with schools, health professionals and parents, and will seek additional partners, to raise awareness and affect the institutional and individual choices that impact these particularly vulnerable populations.

The Program has taken a variety of steps to address the segments of the population that are underserved, such as the homebound; apartment dwellers; the disabled, impaired or activity limited; minority cultural communities; those who use English as a second language; and non-English speakers. We are currently:

- Budgeting funds to assess (in 2010) and begin providing (in 2011) additional services to historically underserved populations;
- Working with predominantly minority, ESL and non-English speaking janitorial, landscaper, and nail salon workers, and business owners, to reduce their exposure to toxic chemicals; and
- Working with staff and residents in low-income government housing, and minority ethnic, ESL and non-English speaking cultural groups and community based organizations through our Environmental Justice in Action project, to reduce their exposure to toxic substances.

In the future, we will consider work that might include:

- Expanding the number of external community groups that we work with and exploring partnerships that could co-deliver our services;
- Focusing on exposures, as opposed to risk, because of our lack of knowledge about many underserved populations;
- Using specific media that are relevant to specific underserved populations; simplifying our messages and means of delivery; involving target populations in the development of our messages; and focusing the delivery of our messages to where those populations are located (i.e., at work, multi-family housing, schools and community centers).

To address the continuing need to serve businesses and institutions that generate small quantities of hazardous waste, and the changing nature of some of those businesses which have rapid turnover in personnel, or have significant changes to their business model such that best management practices are hard to sustain, the Program will continue to:

- Provide technical assistance visits to businesses, help with questions through our Business Waste phone line and e-mail system, help with environmentally preferred purchasing, offer training workshops, and offer other information specifically tailored to businesses like our Hazardous Waste Directory (the Yellow Book);
- Offer our on-line industrial materials exchange (IMEX) service;
- Provide financial assistance to help attain safe storage and disposal of hazardous wastes, and recognition through our EnviroStars certification program for safe practices; and
- Offer disposal of hazardous wastes at all of our collection facilities and services to businesses and institutions.

In working with businesses and other institutions in the future, we will explore:

- Greater customization of our messages, communicating them through as many means as possible and using technology to the greatest extent possible in their delivery;
- Additional incentives and looking as broadly as possible for other potential incentives;
- Pursuing more disclosure of product contents through voluntary means, third party or 'green' product certifications, and by compelling disclosure through legislation;
- Cultivating voluntary self-regulation, encouraging agencies to offer flexible compliance for self-reporting of violations and undertaking voluntary corrections, and variances from regulatory requirements for innovative production, use, storage and disposal methods; and
- Working with new businesses in their start-up phase on hazardous materials best management practices, to try to encourage good practices at the outset.

The Program has undertaken a series of projects in response to the fact that the number, type and complexity of hazardous materials, chemicals and products has sharply increased; work needs to be done to be preventative and work 'upstream' in the manufacturing process to reduce the toxicity of products in their production stage; and that we need to shift the cost burden for the disposal of hazardous products from utility rate payers to the producers and users of those products. Those initiatives include:

- Research efforts to understand and characterize emerging issues and threats around hazardous chemicals, materials and products; and to base our overall work on solid scientific research;
- General work to advance the understanding and acceptance of product stewardship/extended producer responsibility amongst the public, government officials, producers, manufacturers, and the solid waste and recycling industries; and
- Work to secure state product stewardship/extended producer responsibility legislation for unwanted medicines/pharmaceuticals, and mercury containing lighting/compact fluorescent bulbs and tubes.

In the future, within our resource constraints, we would like to:

- Promote product design and redesign to reduce or eliminate hazardous properties;
- Limit 'downcycling' which mixes products in the recycling process and degrades their integrity and value for reuse;
- Cultivate precautionary thinking in the purchase and use of products by businesses and consumers, such that the expectation and burden is on the manufacturer to prove that the product is safe;
- Encourage full disclosure of a product's contents so that its safety can be proven;
- Stimulate the use of safer alternatives to currently used products that are more hazardous;
- Support green chemistry, which is the use of chemicals and processes that reduce or eliminate the generation of hazardous substances and negative environmental impacts; and
- Explore product differentiation to make the most hazardous chemicals and products more expensive and less convenient to obtain and use.

The Program recognizes that effective enforcement is needed for full compliance with hazardous waste regulations, and that education and voluntary efforts alone will not achieve the safe use, storage and disposal of hazardous chemicals, material, products and wastes.

The Program does not currently have direct enforcement authority. However, we do coordinate and support agencies that exercise enforcement authority through federal, state and local rules, regulations and statutes. We currently do this through our:

- Interagency Coordination Team (ICT), which fields teams of regulators, from a variety of agencies, to address hazardous waste problems at intransigent businesses; and Interagency Resource for Achieving Cooperation (IRAC), which coordinates work groups amongst various agencies on various topics, and provides joint training of agency inspectors, as well as work on revising and streamlining regulations.

With regard to enforcement and compliance in the future, we will consider:

- Strengthening and formalizing some of our relationships, around enforcement and compliance, with other agencies;
- Providing financial support to the King County Prosecuting Attorney's office for selected enforcement efforts; and
- Exploring direct enforcement authority options for select Program staff to better ensure compliance with existing hazardous waste laws.

Finally, there are other areas that we may examine to increase the Program's equity, efficiency and effectiveness. The Program plans to examine its financing structure and investigate:

- Whether there are administratively practical ways to increase the equity of our solid waste rate structure for our multifamily and businesses ratepayers; and
- If it makes sense to consider potential additional revenue sources that are related to our increasing work to protect surface water, so that the burden for our services is equitable allocated.

The Program is committed to effective performance measurement; we believe that this area is open to continual improvement and refinement. For the future, we will strive to:

- Thoroughly define the problems we are trying to address;
- Apply clear strategies for addressing those problems; and
- Develop and refine key performance indicators that can show progress in addressing those problems.

The Program also recognizes the need to be prepared to address major natural or human caused emergencies that generate hazardous debris. To do this, the Program plans to:

- Do our regular job, prior to any emergency, of encouraging residents and businesses to reduce their use of hazardous materials; reduce their stockpiles of hazardous materials to the greatest extent possible; and properly dispose of as much hazardous waste as possible by taking it to one of our MRW collection facilities or services; and

- Work with those agencies and cities that have primary operational responsibility to collect and dispose of hazardous debris, and make sure that our debris management planning is synchronized with their planning.

As the various Program Partner agencies within the Program's coalition have grown, changed, reorganized and consolidated, the Program has adapted and grown also. We believe that we will always have the obligation to review and reassess our Program's organization and structure to ensure that it is as efficient and effective as possible in accomplishing our legal mandates and mission on behalf of our ratepayers throughout King County.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

July 8, 2010

Mr. Jay Watson
Local Hazardous Waste Management Program
150 Nickerson Street, Suite 150
Seattle, WA 98109

Dear Mr. Watson:

RE: *Ecology Approval of King County's Local Hazardous Waste Management Plan, Final Draft, April 2010*

Ecology is pleased to approve King County's Local Hazardous Waste Management Plan, submitted for final review and consideration on April 22, 2010.

This Plan demonstrates King County's continued leadership in state and national hazardous waste management and policy reform. Ecology commends you for addressing all of the hazardous waste planning elements in the Plan update. Your program goals are thorough, forward thinking and strategic. The 2007-2008 HHW Service Level Study and the 2007 Small Quantity Generator Disposal Report included in the appendix, demonstrate insightful analysis of efficiency, equity and costs.

Ecology is submitting the following comments for your consideration:

On pgs 2-25, 2-27 and on pg 8 of Appendix D, we would appreciate your acknowledging that Ecology's Coordinated Prevention Grant (CPG) Program provides funding to operate the three fixed facilities and for city collection events. Acknowledgement increases the visibility of the program and helps citizens and decision makers see the value of the CPG Program.

On page 4-1 (4.1.1), Ecology's Hazardous Waste and Toxics Reduction Program provided a clarification. In the sentence, "In Washington State, the management of hazardous waste was delegated to the Washington Department of Ecology ...," the word "delegated" should be changed to "authorized." On page 4-10 (4.3.1), in the fourth paragraph, the word "delegated" should be changed to "authorized."

If you have any questions, please contact Taisa Welhasch at (425) 649-7266 or at taisa.welhasch@ecy.wa.gov.

Sincerely,

Peter Christiansen
Section Manager

cc: Liz Tennant, Local Hazardous Waste Management Program in King County
Taisa Welhasch, WA Department of Ecology



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KING COUNTY
Signature Report

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

April 15, 2010

Resolution 10-04

Proposed No. 10-04.1

Sponsors

1 A RESOLUTION approving and adopting the 2010 plan
2 update for the local hazardous waste management program
3 in King County.

4 WHEREAS, RCW 70.105.220 requires local governments to prepare and
5 implement local hazardous waste plans, and

6 WHEREAS, the local hazardous waste management program ("the program") was
7 launched in 1990 to fulfill that state statute through the efforts of a coalition of local
8 governments including the city of Seattle, King County and the suburban cities within
9 King County, and

10 WHEREAS, the King County Board of Health, in BOH chapter 2.08, established
11 the program's management coordination committee ("the committee") to prepare and
12 implement the required plans through that coalition of governments that are represented
13 on the committee, and

14 WHEREAS, the committee summarized, from those plans, the program's mission,
15 which is to protect and enhance public health and environmental quality in King County
16 by reducing the threat posed by the production, use, storage and disposal of hazardous
17 materials, and

18 WHEREAS, the program's last plan update was in 1997, and, since that time,
19 there have been significant changes in the populations and businesses that the program

20 serves, the number and the complexity of hazardous materials and products that the
21 program addresses, the scientific understanding of the toxicity of those products and the
22 approach that the program is trying to take to reduce or prevent the use of hazardous
23 components in products during their manufacture, and

24 WHEREAS, the program has assessed its past approaches and activities, and
25 worked to obtain input from the public and its program partner agencies, to develop a
26 plan update that comprehensively addresses changes since 1997, including changes in
27 populations and businesses, changes in hazardous products and materials and changes in
28 the program's approaches;

29 NOW, THEREFORE, BE IT RESOLVED by the Board of Health of King
30 County:

Resolution 10-04

- 31 The Board of Health hereby approves and adopts the Local Hazardous Waste
32 Management Program's 2010 Plan Update (April 2010).
33

Resolution 10-04 was introduced on and passed by the Board of Health on 4/15/2010,
by the following vote:

Yes: 11 - Ms. Drago, Ms. Frisinger, Ms. Patterson, Ms. Lambert, Mr.
Licata, Dr. Nicola, Dr. Sherman and Dr. Danielson

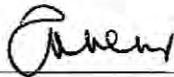
No: 0

Excused: 3 - Mr. Hutchinson, Mr. Conlin and Ms. Clark

BOARD OF HEALTH
KING COUNTY, WASHINGTON


Julia Patterson, Chair

ATTEST:



Anne Noris, Clerk of the Board

Attachments: None

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A Note about the Maps

The maps used in the 2010 Plan Update come from a variety of sources. Some are original maps; others are modified versions of maps borrowed from other sources. The Program is particularly grateful to King County Solid Waste Division's GIS Program, for their assistance in developing the maps that are used in this report.

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